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Journal of the Belles Lettres, Science, and Art.

No. 1950.

LONDON, SATURDAY, JUNE 3, 1854.

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REVIEWS.

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By Sir David Brewster, F.R.S. Murray.
A Dialogue on the Plurality of Worlds: being a Supplement to the Essay on that Subject. John W. Parker and Son.

SIR DAVID BREWSTER'S book is a reply to the Essay on the 'Plurality of Worlds,' of which we gave an account two months since. That work, as we then hinted, has been attributed to Dr. Whewell, and the authorship has not been disowned, if it is not virtually admitted by him, in this supplementary dialogue. The essayist is, certainly a writer of no mean standing, both in literature and science, and displays a variety of qualifications, possessed by few men in this country, and by none more conspicuously than by the present Master of Trinity. A controversy in which men like Whewell and Brewster are the opponents cannot but be regarded with intense interest by the scientific world, if the subject be worthy of the knowledge and ability of such combatants. But the question of the plurality of worlds can scarcely be brought within the range of philosophical discussion, at least so far as the principles of inductive science are concerned. Where there are absolutely no facts upon which to argue there can be no conclusions deserving to be classed with received truths of science. Hitherto the speculations about the inhabitants of other worlds have been considered merely as philosophical romances, with which men of poetical temperament were pleased to amuse themselves. Fontenelle's charming work was the first to attract general attention to the subject. Since that time the idea of the plurality of worlds, in the sense in which Fontenelle understood it, has gained currency. Astronomers have not ventured to assert what they knew could be maintained by no scientific proofs, but, at the same time, they have not interfered with popular beliefs which appeared to be harmless. Gradually these vague speculations have been assuming the form of more positive assertions, and what at first was regarded as an open question, on the border region of philosophy and of poetry, has been dragged by some scientific men into their peculiar domain, and presented along with other received truths in a didactic form. Thus Dr. Lardner, who, although not one of our first scientific men, is in the first rank among the popular expounders of science, commences a new series of works, 'The Museum of Science and Art,' with a paper on the Plurality of Worlds, in which the doctrine of other worlds being peopled with beings akin in physical and mental structure to man is spoken of as the general belief of astronomers. A great step in advance is taken when a man of science of the reputation and acquirements of Sir David Brewster maintains the thesis, under the form of 'More Worlds than One, the Creed of the Philosopher and the Hope of the Christian;' that is to say, that the belief of the plurality of worlds is as much to be held as any of the results of scientific research, or any of the doctrines of revealed truth.

Let the terms of the present controversy be clearly understood. It appears not merely that other orders of intelligent beings are affirmed to exist in other worlds, but that

these beings have corporeal frames, analogous to those of the human race. The whole of the discussion proceeds on this assumption. That there are other orders of intelligent creatures revelation teaches and reason admits, but to materialise these beings and to localise them in particular stars, is the express design of the advocates of the plurality of worlds. Nor can this be done without assimilating these material beings to the human race. Fontenelle, in his Dialogues, makes the inhabitants of Venus possess, in an exaggerated degree, the characteristics of the men of the warm climates of the earth. They are like the Moors of Grenada, or, rather, the Moors of Grenada would be to them as cold as Greenlanders and Laplanders to us. And the inhabitants of Mercury have so much vivacity that they would pass with us for insane. 'Enfin c'est dans Mercure que sont les petites-maisons de l'univers.' The inhabitants of Jupiter and Saturn are immensely slow and phlegmatic. And though he and other writers attempt to make these inhabitants of remote regions in some respects superior to man, telling us that instead of only five senses they may have six or ten, or a hundred, still these are mere words, which convey no meaning; and the great astronomer Bessel had reason to say that those who imagined inhabitants of the moon and planets, supposed them, in spite of all their protestations, as like to men as one egg to another. Sir David Brewster does not shrink from this affirmation, maintaining that even the sun is peopled with inhabitants whose pursuits and occupations do not differ from those of terrestrial races:

"It has been stated as an objection to the probability of the sun's being inhabited; that the whole firmament would be hid by the double atmosphere with which he is surrounded, and that the solar inhabitants would be excluded from all knowledge of the planets which he guides, and of the sidereal universe of which he is a part. This, however, is not strictly true. The planets and stars would be seen distinctly through the numerous openings in the solar atmosphere, and as the sun's surface is comparatively near to these openings, large portions of the heavens would be thus exposed to view. In many parts of our own globe weeks pass away without our seeing the sun or the stars, and it cannot be doubted that the inhabitants of the sun might study astronomy through the casual openings in the luminous cupola which encloses them."

In support of this position not only astronomical but physiological science is brought to bear. The theories of Professor Owen, as to types of organised creatures, are adduced, in order to show the probability of the life existing in other worlds being not only intelligent but embodied in animal and vertebrate forms:—

"The observations of Professor Owen on ideal archetypes throw a real light on the subject of a plurality of worlds. If there be an ideal exemplar or archetype of vertebrate animals, and if the conceivable modifications of that archetype are far from being exhausted either in the animal forms which now inhabit the earth, or in the fossil remains of its primeval tenants, it is no idle speculation to suppose that the modifications may be developed in the vertebrate animals of other planets. We have a reason, therefore, besides those of analogy and congruity, to believe in the existence of beings both intellectual and animal in the other regions of space. And as there must be an exemplar of intellectual as well as of physical man, may we not equally expect in the upper spheres modifications of mind which have not been exhibited in the terrestrial races? If the rudimentary wing of man be expanded into the soaring

pinion of the eagle, may not those mental powers which are only rudimentary here, and which fail in grasping the infinite and the eternal, expand themselves in another planet, and approximate to that divine intelligence of which they are here but a feeble emanation?"

The nature of the argument for the existence of animal life in other worlds will be more fully seen in Sir David Brewster's statement of the condition of the planet Jupiter, with respect to its being inhabited, as compared with our own earth:—

"The diameter of Jupiter being 87,000 miles, and that of the Earth 7926, the relative size or bulk of the two planets will be proportional to the squares of these numbers. Hence the size or bulk of Jupiter is 1200 times greater than that of the Earth, and this alone is a proof that it must have been made for some grand and useful purpose. Like the Earth it is flattened at its poles, and it revolves round its axis in 9h. 56m., which is the length of its day. It enjoys different climates, and different seasons in its year; but, what especially demands our attention, it is illuminated by four moons, capable of supplying it with abundance of light during the short absence of the sun. Owing to the small inclination of Jupiter's axis to the plane of its orbit, which is only about three degrees, there is so little change in the temperature of its seasons, that it may be said to enjoy a perpetual spring. The rotation of the Earth about its axis produces currents in its atmosphere parallel to the equator, which have received the name of the trade winds. On the surface of Jupiter astronomers have observed streaks or belts to the number of thirty, some of which extend to a great distance from its equator. Large spots, which change their form, have also been frequently seen upon Jupiter. M. Madler, by whom these observations have been chiefly made, is of opinion, that owing to the length of Jupiter's year, and the small change which takes place in the seasons, the masses of clouds in his atmosphere have their form, position, and arrangement more permanent than those in the atmosphere of the Earth, and he thinks it probable that the inhabitants in latitudes greater than 40° may never see the firmament.

"The satellites of Jupiter afford him perpetual moonlight. They suffer eclipses like our moon when they encounter his huge shadow, and they frequently eclipse the sun when they pass between him and the planet. These satellites afford to their primary planet four months of different lengths, one of which is four Jovian days, and the next eight, seventeen, and forty days respectively.

"With so many striking points of resemblance between the Earth and Jupiter, the unprejudiced mind cannot resist the conclusion that Jupiter has been created like the Earth for the express purpose of being the seat of animal and intellectual life. The Atheist and the Infidel, the Christian and the Mahometan,—men of all creeds and nations and tongues,—the philosopher and the unlettered peasant, have all rejoiced in this universal truth; and we do not believe that any individual, who confides in the facts of astronomy, seriously rejects it. If such a person exists, we would gravely ask him for what purpose could so gigantic a world have been framed. Why does the sun give it days and nights and years? Why do its moons throw their silver light upon its continents and its seas? Why do its equatorial breezes blow perpetually over its plains? Unless to supply the wants, and administer to the happiness of living beings.

"In studying this subject, persons who have only a superficial knowledge of astronomy, though firmly believing in a plurality of worlds, have felt the force of certain objections, or rather difficulties, which naturally present themselves to the inquirer. The distance of Jupiter from the sun is so great that the light and heat which he receives from that luminary is supposed to be incapable of sustaining the same animal and vegetable life which exists on the Earth. If we consider the heat upon any planet as arising solely from the direct rays of the sun, the cold upon Jupiter must be very intense,

and water could not exist upon its surface in a fluid state. Its rivers and its seas must be tracks and fields of ice. But the temperature of a planet depends upon other causes,—upon the condition of its atmosphere, and upon the internal heat of its mass. The temperature of our own globe decreases as we rise in the atmosphere, and approach the sun, and it increases as we descend into the bowels of the Earth and go farther from the sun. In the first of these cases, the increase of heat as we approach the surface of the Earth from a great height in a balloon, or from the summit of a lofty mountain, is produced by its atmosphere; and in Jupiter the atmosphere may be so formed as to compensate to a certain extent the diminution in the direct heat of the sun arising from the great distance of the planet. In the second case, the internal heat of Jupiter may be such as to keep its rivers and seas in a fluid state, and maintain a temperature sufficiently genial to sustain the same animal and vegetable life which exists upon our own globe.

"These arrangements, however, if they are required, and have been adopted, cannot contribute to increase the feeble light which Jupiter receives from the sun; but in so far as the purposes of vision are concerned, an enlargement of the pupil of the eye, and an increased sensibility of the retina, would be amply sufficient to make the sun's light as brilliant as it is to us. The feeble light reflected from the moons of Jupiter would then be equal to that which we derive from our own, even if we do not adopt the hypothesis, which we shall afterwards have occasion to mention, that a brilliant phosphorescent light may be excited in the satellites by the action of the solar rays.

"Another difficulty has presented itself, though very unnecessarily, in reference to the shortness of the day in Jupiter. A day of ten hours has been supposed insufficient to afford that period of rest which is requisite for the renewal of our physical functions when exhausted with the labours of the day. This objection, however, has no force. Five hours of rest is surely sufficient for five hours of labour; and when the inhabitants of the temperate zone of our own globe reside, as many of them have done, for years in the arctic regions, where the length of the days and nights are so unusual, they have been able to perform their functions as well as in their native climates.

"A difficulty, however, of a more serious kind is presented by the great force of gravity upon so gigantic a planet as Jupiter. The stems of plants, the materials for buildings, the human body itself, would, it is imagined, be crushed by their own enormous weight. This apparently formidable objection will be removed by an accurate calculation of the force of gravity upon Jupiter, or of the relative weight of bodies on its surface. The mass of Jupiter is 1230 times greater than that of the Earth, so that if both planets consisted of the same kind of matter, a man weighing 150 pounds on the surface of the Earth would weigh 150+1200, or 180,000 pounds at a distance from Jupiter's centre equal to the Earth's radius. But as Jupiter's radius is eleven times greater than that of the Earth, the weight of bodies on his surface will be diminished in the ratio of the square of his radius, that is, in the ratio of 11+11, or 121 to 1. Consequently, if we divide 180,000 pounds by 121, we shall have 1487 pounds as the weight of a man of 150 pounds on the surface of Jupiter, that is less than ten times his weight on the Earth. But the matter of Jupiter is much lighter than the matter of our Earth, in the ratio of 24 to 100, the numbers which represent the densities of the two planets, so that if we diminish 1487 pounds in the ratio of 24 to 100, or divide it by 4.17, we shall have 352 pounds as the weight of a man on Jupiter, who weighs on the Earth only 150 pounds, that is, only double his weight—a difference which actually exists between many individuals on our own planet. A man, therefore, constituted like ourselves, could exist without inconvenience upon Jupiter; and plants, and trees, and buildings, such as occur on our own Earth, could grow and stand secure in so far as the force of gravity is concerned.

"In removing difficulties, and answering objections such as these, we have conceded too much to the limited conceptions of the persons who have felt the one and adduced the other. To assume that the inhabitants of the planets must necessarily be either men or anything resembling them, is to have a low opinion of that infinite skill which has produced such a variety in the form and structure and functions of vegetable and animal life. In the various races of man which occupy our globe, there is not the same variety which is exhibited in the brutes that perish. Although the noble Anglo-Saxon stands in striking contrast with the Negro, and the lofty Patagonian with the diminutive Esquimaux, yet in their general form and structure, they are essentially the same in their physical and in their mental powers. But when we look into the world of instinct, and survey the infinitely varied forms which people the earth, the ocean, and the air;—when we range with the naturalist's eye from the elephant to the worm—from the leviathan to the infusoria—and from the eagle to the ophemerion, what beauty of form—what diversity of function—what variety of purpose is exhibited to our view! In all these forms of being, reason might have been given in place of instinct, and animals the most hostile to man, and the most alien to his habits, might have been his friend and his auxiliary, in place of his enemy and his prey. If we carry our scrutiny deeper into nature, and survey the infinity of regions of life which the microscope discloses, and if we consider what other breathing worlds lie far beyond even its reach, we may then comprehend the variety of intellectual life with which our own planets and those of other systems may be peopled. Is it necessary that an immortal soul should be hung upon a skeleton of bone, or imprisoned in a cage of cartilage and of skin? Must it see with two eyes, and hear with two ears, and touch with ten fingers, and rest on a duality of limbs? May it not reside in a Polyphemus with one eyeball, or in an Argus with a hundred? May it not reign in the giant forms of the Titans, and direct the hundred hands of Briareus? But setting aside the ungainly creations of mythology, how many probable forms are there of beauty, and activity, and strength, which even the painter, the sculptor, and the poet could assign to the physical casket in which the diamond spirit may be enclosed; how many possible forms are there, beyond their invention, which eye hath not seen, nor the heart of man conceived?

"But no less varied may be the functions which the citizens of the spheres have to discharge,—no less diversified their modes of life,—and no less singular the localities in which they dwell. If this little world demands such duties from its occupants, and yields such varied pleasures in their discharge;—If the obligations of power, of wealth, of talent, and of charity to humanize our race, to unite them in one brotherhood of sympathy and love, and unfold to them the wonderful provisions for their benefit which have been made in the structure and preparation of their planetary home:—If these duties, so varied and numerous here, have required thousands of years to ripen their fruit of gold, what inconceivable and countless functions may we not assign to that plurality of intellectual communities, which have been settled, or are about to settle, in the celestial spheres? What deeds of heroism, moral, and perchance physical! What enterprises of philanthropy,—what achievements of genius must be required in empires so extensive, and in worlds so grand."

We have quoted the argument as to Jupiter at length, because it is by far the strongest case, the analogies with respect to the condition of animal life in remoter worlds, and in the stars, nebulae, and comets, being far weaker, though affirmed to be also sufficient to bring the belief of their being peopled within the creed of the philosopher and the hope of the Christian:—

"A house without tenants, a city without citizens, present to our minds the same idea as a planet without life, and a universe without inhabi-

tants. Why the house was built, why the city was founded, why the planet was made, and why the universe was created, it would be difficult even to conjecture. Equally great would be the difficulty were the planets shapeless lumps of matter poised in ether, and still and motionless as the grave: But when we consider them as chiselled spheres teeming with inorganic beauty, and in full mechanical activity, performing their appointed motions with such miraculous precision, that their days and their years never err a second of time in hundreds of centuries, the difficulty of believing them to be without life is, if possible, immeasurably increased. To conceive any one material globe, whether a gigantic clod slumbering in space, or a noble planet equipped like our own, and duly performing its appointed task, to have no living occupants, or not in a state of preparation to receive them, seems to us one of those notions which could be harboured only in an ill-educated and ill-regulated mind,—a mind without faith and without hope: But to conceive a whole universe of moving and revolving worlds in such a category, indicates, in our apprehension, a mind dead to feeling and shorn of reason."

Let us now examine the position taken up by the essayist. Having already given an outline of his arguments, in reviewing the work, we here simply refer to the statements in the Supplementary Dialogue, prepared after considering what Sir David Brewster and others have written in objection to his Essay. Dr. Whewell, if we may assume the work to be his, does not deny the doctrine of the plurality of worlds. "I only proposed," he says, "to show that this notion has been taken up on insufficient grounds, and that the most recent astronomical discoveries point the opposite way." The question *pourquoi non?* which has been the chief argument ever since Fontenelle's time, is thus stated in the Dialogue, the references being to passages in the Essay, in which the several points are fully discussed:—

"D. But why should the planets and stars not be inhabited? How can you pretend to limit the power of the Creator? Might he not make creatures fitted to live in the stars?

"Z. This I have answered Chap. xi. Art. 15, &c. No doubt the Creator might make creatures fitted to live in the stars, or in the small planetoids, or in the clouds, or on meteoric stones; but we can not believe that he has done this, without further evidence.

"D. But we have the evidence of analogy. The planets are like the earth. The stars are like the sun.

"Z. In Chap. viii. Art. 9, &c., I have considered this likeness, as regards the stars; and as to the evidence of analogy, I have remarked, Art. 29, that the question is whether there is an analogy. It appears to me probable that there is not. The likeness of the planets to the earth, I have considered at length in Chapters ix. and x. We are still among the arguments which, as I conceive, I have answered."

After examining what has been urged on the subject of nebulae, the analogies in favour of the stars being peopled planets are thus considered:—

"K. But you will find the clearing away the inhabitants of the Fixed Stars, or their planetary systems, a harder task. Why should you not allow us to believe that there are such inhabitants? You cannot deny that our Sun, seen from one of the fixed stars, would look as Sirius looks to us, and that all the Planets would be imperceptible. Is not this good reason for supposing that there is a Sirian system as there is a Solar system?

"Z. Let me ask in reply, whether it is not a strange way of finding good reason for supposing the existence of a system, to go so far off that you cannot see whether it is there or not? You may go so far from the Sun that he will look like Sirius,

as you may go so far from a house that it will look like a rock; but this does not prove, nor make it probable, that a class of objects which look like rocks are really houses.

"K. This proves that such objects may be houses; and so, the stars may be inhabited.

"Z. May be, so far as we can judge from looking at them in this way. But perhaps we can obtain also other means of judging.

"K. Yes; but here again you take the exceptional cases to reason from:—Double Stars, Changeable Stars, and the like. And yet, how few stars of this kind are there, compared with the whole collection of stars!

"Z. I reason from such cases, because such cases give me something to reason from. But here again, as with the nebulae, I think you will find that the most recent views of the best astronomers do not represent as so very rare, the cases from which I reason. In the great work which M. Struve has lately published, containing the record of his labours on Double Stars at Dorpat, he gives, as the result of his careful examination and comparison of the whole body of facts in stellar astronomy, some conclusions which may perhaps startle you and others who regard Double and Multiple Stars as cases so completely exceptional. He examines especially the brighter stars,—those comprised between the first and fourth magnitudes,—and arrives at the conclusion that *every fourth* star of such stars in the heavens is physically double. He even ventures to assert, that when we have acquired a more complete knowledge of double stars, it will be found that *every third* bright star is physically double. Applying these considerations to the stars of inferior orders of magnitude, he finally arrives at the following conclusion, which he admits to be of an unexpected character:—that the number of insulated stars is indeed greater than the number of compound systems; but only three times, perhaps only twice as great. Now, if we recollect that the double and multiple stars cannot be supposed to have systems of planets except by the making most arbitrary hypotheses, in defiance of all analogy; and that of the single stars, a large proportion may be irregular masses, or limited nebular patches, very unlike the sun, as we know that some are; it would seem to be a very bold and baseless assumption, that they all, or the great majority of them, have attendant planets, as our Sun has.

"K. But surely it would be very bold to maintain that of all the innumerable stars which spangle the sky, and which astronomers have hitherto held to be bodies of the same nature as our sun, not one is really like the sun, in having planets revolving round him.

"Z. It would be very bold to maintain that all have not; and no less bold, it seems to me, to maintain that many have, or even that one has, without further evidence. Of the nature of the stars, we know scarcely anything, except that they are seemingly self-shining, very nearly fixed (as to our sense), and exceedingly distant from us. In this state of ignorance, to assert that they have, and that they have not, attendant planets, would be alike rash. To assert that if they have attendant planets, these planets have inhabitants, would be more rash; and still much more, if it appear probable, as I think it will, that the other planets of our system have not inhabitants. If we fix our thoughts on any 'bright particular star,' we may easily imagine it to have inhabitants; as we may easily imagine a central cavity in the earth tenanted by inhabitants. But the only way of passing judgment on such imaginations with regard to the Fixed Stars, is to look at the Fixed Stars as a class of objects. Now as a class of objects which we may imagine to be inhabited, the Fixed Stars stand between the Planets and the Nebulae. More remote than the Planets, but limited in form like them; distant and luminous like the Nebulae. I think I have proved that the Nebulae are not habitations; I think I make it probable that the Planets in general are not. This being so, it seems contrary to the scheme of gradation on which nature generally proceeds, to say that the inter-

mediate class are habitations:—or rather, centers of systems of inhabited masses, of which masses the very existence is quite unproved.

"K. But their being the centers of such systems is proved by analogy from their resemblance to the Sun.

"Z. But the evidence of this resemblance was always very loose; and becomes the feebler, the more it is examined, as I have been telling you on Struve's authority. It appears, by his researches, that one-third of the Fixed Stars differ from our Sun, in the broad fact of not being single masses, but systems of two or more luminous masses lying near each other, or revolving about one another; which entirely puts an end to any probability of a planetary system on the ground of analogy. To these cases of differences, which exist between the stars and the sun, you must add the other *known* kinds of difference, as the cases of variable stars: and you will hardly doubt, that when there exist several known kinds of difference, in a class of objects of which we know so little, there must be other kinds of difference, which are *unknown*. So that the assumption of stellar planetary systems, on the ground of the close resemblance between the stars and the sun, appears to dwindle away to nothing, when closely scrutinized."

The gist of the whole controversy, in its scientific aspects, lies in the remark that while it would be bold to deny the existence of planetary inhabitants of other solar systems, it is also bold to affirm that there are inhabitants of planets, the very existence of which is quite unproved. There may be planets circling other suns, and these planets may be peopled with beings organised like those of this earth; but do not insist, says the essayist, upon all this forming part of the creed of the philosopher. Let there be some distinction between the results of scientific discovery and of imaginative speculation. Where science knows nothing science ought to affirm nothing. Analogy is useful in its own field, but cannot be allowed to intrude into the province of observation. As to the analogies from astronomy, the weight of proof is quite as much against as for the other planets being inhabited by beings at all comparable to man. The physiological researches of Professor Owen are thus brought to bear on the argument:—

"Mr. Owen says, 'The naturalist and anatomist, in digesting the knowledge which the astronomer has been able to furnish, regarding the planets and the mechanism of the satellites for illuminating the night season of the distant orbs that revolve round one common sun, can hardly avoid speculating on the organic mechanism that may exist, to profit by such sources of light, and which must exist if the only conceivable purpose of these beneficent arrangements is to be fulfilled.'

"Mark the last clause.

"Z. I mark it; and mark you, too, the sequel. Mr. Owen goes on to argue, very ingeniously, that the moons of Jupiter exist to give light:—that light being governed, there, by the same laws as here,—the animals must have eyes organized on the same dioptric principles as on the earth; and that as the bony orbits in which eyes are placed, in this planet, are constructed of modified vertebrae, it will not appear so hazardous, to infer that the animals on other planets may also be vertebrate.

"T. And what have you to say against this?

"Z. Nothing. If there be anywhere animals which are bony, the simplest supposition is, that they are also vertebrate. I do not know how any one can reason better, as to the structure of the animals which inhabit other planets, if there are such animals.

"T. But you see, Mr. Owen says that such animals must exist, if the only conceivable purpose of the beneficent planetary arrangement is to be fulfilled.

"Z. I have learnt much from Mr. Owen. I

have learnt from him, in many most striking cases, to admire purpose in organic arrangements, where purpose is apparent. But I have learnt from him also, that to infer facts from 'an only conceivable purpose,' is a very hazardous process."

If the same laws of light exist in other planets as on our own earth, and if there are animals there, Professor Owen's views, as thus stated, would lead to the conclusion that these animals are vertebrate. Yet analogy, even if safe in guiding to such a general conclusion, is at fault, if an attempt is made to advance to more special assertions. Sir David Brewster thinks it inconceivable that the sun should give to Jupiter days and nights and years, and that the moons of that planet should throw their silver light upon its continents and seas, except for the same uses that our earth has also its times and seasons. The wonderful arrangements of Jupiter would be in vain, if it were devoid not merely of living beings, but if its inhabitants were other than intelligent creatures, capable of "studying and developing the material laws in operation around them, above them, beneath them, and beyond them, in the skies." This is the argument drawn by Sir David Brewster from the analogy of our earth. But what says Geology to this analogical argument? On our earth, perhaps for millions of years, there were the same wonderful arrangements of times and seasons, and the same laws of light, and other physical conditions supposed to render the existence of high intelligence a necessary belief, yet this planet was peopled only by brute creatures, such as the essayist supposes may now float in the viscid waters of Jupiter. Sir David Brewster perceives the strength of this argument from geology, which was forcibly put by Mr. Hugh Miller, in his 'First Impressions of England,' and he is led to propound the theory that possibly the human race, or some order of beings as superior to the monsters of the geological epochs, existed on the earth ages before the Mosaic creation, the remains of which may yet be discovered:—

"The dry land upon our globe occupies only *one-fourth* of its whole superficies—all the rest is sea. How much of this *fourth* part have geologists been able to examine? and how small seems to be the area of stratification which has been explored? We venture to say not *one-fiftieth* part of the whole, and yet upon the results of so partial a survey, there has been founded a startling generalization. The intellectual races, if they did exist, must have lived at a distance from the ferocious animals that may have occupied the seas and the jungles of the ancient world, and consequently their remains could not have been found in the ordinary fossiliferous strata. Their dwelling-place may have been in one or more of the numerous localities of our continents not yet explored, or in those immense regions of the earth which are now covered by the great oceans of the globe; and till these oceans have quitted their beds, or some great convulsions have upheaved and laid bare the strata above which the races in question may have lived and died, we are not entitled to maintain it as a demonstrated truth, that the ancient earth was under the sole dominion of the brutes that perish.

"But without waiting for the result of catastrophes like these, the future of geology, even if restricted to existing continents and islands, may be pregnant with startling discoveries, and the remains of intellectual races may be found even beneath the primitive *Azoic* formations of the earth. The astronomers of the present day have penetrated far into the celestial depths, compared with those of the preceding age,—describing in the remotest space glorious creations, and establishing mighty laws. Like them, may not geologists descend deeper into the abyss beneath, and discover in

caverns yet unexplored the upheaved cemeteries of primordial times? The earth has yet to surrender its strongholds of gigantic secrets,—and startling revelations are yet to be read on sepulchres of stone. It is not from that distant bourne where the last ray of starlight trembles on the telescopic eye that man is to receive the great secret of the world's birth, or of his future destiny. It is from the deep vaults to which primeval life has been consigned that the history of the dawn of life is to be composed. Geologists have read that chronology backwards, and are decyphering downwards its pale and perishing alphabet. They have reached the embryos of vegetable existence, the probable terminus of the formation which has buried them. But who can tell *what sleeps beyond!* Another creation may lie beneath—more glorious creatures may be entombed there. The mortal coils of beings more lovely, more pure, more divine than man, may yet read to us the unexpected lesson that we have not been the first, and may not be the last of the intellectual race."

To such a shift as this is a man of science driven, who has incautiously followed analogies as implicitly as ascertained facts. The real issue of the whole controversy, when exposed to strict scientific examination, is thus truly stated by Dr. Whewell, in his Dialogue:—

"U. But your arguments are merely negative. You only prove that we do not know the planets to be inhabited.

"Z. If, when I have proved that point, men were to cease to talk as if they knew that the planets are inhabited, I should have produced a great effect.

"U. Your basis is too narrow for so vast a superstructure, as that all the rest of the universe besides the earth is uninhabited.

"Z. Perhaps: for my philosophical basis is only the earth, the only known habitation. But on this same narrow basis, the earth, you build up a structure that other bodies are inhabited. What I do is, to show that each part of your structure is void of tenacity, and cannot stand.

"It is probable that when we have reduced to their real value all the presumptions, drawn from physical reasoning, for the opinion of planets and stars being either inhabited or uninhabited, the force of these will be perceived to be so small, that the belief of all thoughtful persons on this subject will be determined by moral, metaphysical, and theological considerations."

Setting aside, therefore, the arguments drawn from physical considerations as null on either side, let us briefly view the question in its theological aspect. Here Sir David Brewster's case is somewhat better made out, and there are grounds for inferences of the kind admissible in the study of revealed truth. Various passages of the sacred scriptures are adduced, of which these are the most apposite and striking:—

"The writers, both in the Old and New Testament, speak of the heavens as a separate material creation from the earth, and there are passages which seem very clearly to indicate that they are the seat of life. When St. Paul tells us that the *worlds* were framed by the word of God, and that by our Saviour, the heir of all things, He made the *worlds*, we are not entitled to suppose that he means globes of matter, revolving without inhabitants, or without any preparation for receiving them. He can only mean *worlds* like our own, that declare to their living occupants the glory of their Maker. When Isaiah speaks of the heavens being *spread out as a tent to dwell in*, when Job tells us that God, who *spread out the heavens, made Arcturus, Orion, and Pleiades, and the chambers of the south*, and when Amos speaks of Him who buildeth His stories in the heavens, (*His house of many mansions*;) they use terms which clearly indicate that the celestial spheres are the seat of life. In the book of Genesis, too,

God is said to have finished the heavens and the earth, and *all the host of them*. Nehemiah declares that God made the *heaven, the heaven of heavens, and all their host*, the earth and all things that are therein, and that the *host of heaven worship Him*. The Psalmist speaks of *all the host of the heavens as made by the breath of God's mouth*, (the process by which He gave life to Adam;) and Isaiah furnishes us with a striking passage, in which the occupants of the earth and of the heavens are separately described. 'I have made the earth, and created man upon it: I, even my hands, have stretched out the heavens, and all their host have I commanded.' But in addition to these obvious references to life and things pertaining to life, we find in Isaiah the following remarkable passage, 'For thus saith the Lord, that created the heavens, God himself that formed the earth and made it; he hath established it, *he created it NOT IN VAIN, he formed it TO BE INHABITED*.' Here we have a distinct declaration from the inspired prophet, that the earth would have been created IN VAIN if it had not been formed to be inhabited; and hence we draw the conclusion, that as the Creator cannot be supposed to have made the worlds of our system, and those in the sidereal universe in vain, they must have been formed to be inhabited.

"These views, as deduced from Scripture, receive much support from considerations of a very different nature. Man in his future state of existence is to consist, as at present, of a spiritual nature residing in a corporeal frame. He must live therefore upon a material planet, subject to all the laws of matter, and performing functions for which a material body is indispensable. We must therefore find, for the race of Adam, if not for races that preceded him, a material home upon which he may reside, or from which he may travel by means unknown to us, to other localities in the universe."

In the latter part of this quotation it will be observed that Sir David Brewster returns to the idea of the people of other worlds being either human, or so much akin to man as to be his associates. This is the groundwork of the whole of his treatise. The motto on the title-page expresses this idea.—

"Bright star of eve, that send'st thy softening ray
Through the dim twilight of this nether sky,
I hail thy beam like rising of the day,
Hast thou a home for me when I shall die?"

"Is there a spot within thy radiant sphere,
Where love, and faith, and truth, again may dwell;
Where I may seek the rest I find not here,
And clasp the cherished forms I loved so well?"

And, in the opening of the book, in stating the doctrine which he is prepared to maintain, we are more fully informed what the author understands by the plurality of worlds as the hope of the Christian:—

"Before the birth of Astronomy, when our knowledge of space terminated with the ocean or the mountain range that bounded our view, the philosopher could but place his elysium in the sky; and even when revelation had unveiled the house of many mansions, the Christian sage could but place his future home in the new heavens and in the new earth of his creed. Thus vaguely shadowed forth, thus seen as through a glass darkly, the future even of the Christian, though a reality to his faith, was but a dream to his reason; and in vain did he inquire what this future was to be in its physical relations,—in what region of space it was to be spent,—what duties and pursuits were to occupy it,—and what intellectual and spiritual gifts were to be its portion. But when Science taught us the past history of our earth, its form, and size, and motions,—when Astronomy surveyed the solar system, and measured its planets, and pronounced the earth to be but a tiny sphere, and to have no place of distinction among its gigantic compeers,—and when the Telescope established new systems of worlds far beyond the boundaries of our own, the future of the sage claimed a place throughout the universe, and inspired him with an interest in worlds, and systems of worlds,—in life

without limits, as well as in life without end. On eagles' wings he soared to the zenith, and sped his way to the horizon of space, without reaching its ever-retiring bourne; and in the infinity of worlds, and amid the infinity of life, he descried the home and the companions of the future.

"That these views are in accordance with the demonstrated truths of astronomy, and deducible from them by analogies which guide us in the ordinary business of life, it will be the object of this Essay to shew."

For a philosopher this theory of a future state may be satisfactory. To him the highest idea of happiness may be in an eternity of astronomical observations and philosophical discussions, "amid worlds and systems of worlds, in life without limits, as well as in life without end." Whether the happy astronomer is to be fixed in any particular region of space, some "bright particular star," as the motto on the title-page suggests, or whether, as the author elsewhere expresses his hope, he is "to soar through space, without reaching its ever-retiring bourne," is not clearly explained. If the latter is to be the destiny of the blessed, the resurrection of the body, and other old-fashioned Christian doctrines, must be discarded. Neither are we informed whether these pursuits and studies are to be the lot of all mankind, with purified hearts and enlarged understandings, according to the doctrine of universal salvation, or whether they are reserved as the reward of philosophers, who have, on earth, formed a taste for learning and shown a thirst for knowledge. In the latter case, as the Mahometan paradise for the faithful believer, and the Gothic Walhalla for the fearless warrior, there is held out to the patient cultivator of science the hope of boundless fields of physical research, and "in the infinity of worlds and amid the infinity of life he descries the home and the companions of the future." Such is the explanation given by Sir David Brewster of the plurality of worlds as the hope of the Christian. But we think that ordinary readers of the Bible, whose imaginations are not excited by scientific enthusiasm, will be satisfied with looking for "new heavens and a new earth, wherein dwelleth righteousness." This hope may be only "vaguely shadowed forth, thus seen as through a glass darkly," astronomy not having in the Apostle's time surveyed the solar system, and the telescope not having established new systems of worlds; yet, in spite of the revelations of science, the hope of most Christians will still cling fondly to this earth, in its purified state, and with its renewed inhabitants, and shrinks from the cold idea of the dispersion of the human race amidst distant stars and nebulae. Facilities of scientific observation and the pleasure of intellectual discovery offer poor compensation, to the majority of Christians, for hopes more congenial to their spiritual tastes and suitable to their capacities. But there is less objection to Sir David Brewster's views, if they are applicable to philosophers only, as seems to be intended, when he says that, since the discoveries of the telescope, "the future of the sage claimed a place throughout the universe."

There are other theological and moral views, which have been brought to bear upon the subject, but they are of too solemn a nature to be discussed in the cursory manner to which our space confines us. The essayist, in his Dialogue, refers to these considerations, and comes to the conclusion that the special truths of the Christian revelation are opposed,

rather than otherwise, to the idea of other worlds being peopled by beings similar or superior to the human race:—

"I do not attempt to disprove the Plurality of Worlds by taking for granted the truths of revealed religion; but I say that the teaching of religion may, to a candid inquirer, suggest the wisdom of not taking for granted the plurality of worlds. Religion seems, at first sight at least, to represent man's history and position as unique. Astronomy, some think, suggests the contrary. I examine the force of this latter suggestion, and it seems to me to amount to little or nothing.

"The events which took place upon earth eighteen hundred years ago, were connected with a train of events in the history of man, which had begun at the creation of man, and extended through all the intervening ages: and the bearing of this whole series of events upon the condition of the inhabitants of other worlds must be so different from its bearing on the condition of man, that the hypothesis needs a dozen other auxiliary hypotheses to make it intelligible."

In this view of the uniqueness of the human race there is no room for feelings of pride, for it is not man in his fallen and sinful state that is to be considered, but as his nature once appeared in its divine archetype, and as prophecy leads us to hope it will yet be manifested. Considering the distinguished dignity with which human nature has thus been invested, and the great purposes in the Divine Government with which it is associated, we may well be led to caution in forming theories which depreciate the importance of the peculiar doctrines of the Christian faith. Far as such a thought must have been from the mind of Sir David Brewster, such is the tendency of his work, and the use that will probably be made of it. When loose ideas about the inhabitants of other worlds were transferred from the region of poetry into that of philosophy, and assumed the form in which they appear in Sir David Brewster's book, it was time that some protest should be made on the part of science, and we only regret that it has been done anonymously. The Essay on the Plurality of Worlds is a book of caution and rebuke to imaginative astronomers, and a masterly illustration of some of the first principles of Inductive Science. It does not deny the doctrine of the Plurality of Worlds, nor object to astronomers amusing themselves with theories on the subject. But it says, "Do not make use of your conjectures as if they were ascertained facts, and do not call that which rests only on vague analogies and dubious speculations, 'the creed of the philosopher and the hope of the Christian.'"

Correggio: a Tragedy. By Adam Oehlenschläger. Translated, with Notes, by Theodore Martin. John W. Parker and Son.

A FEW world-famed exceptions set apart, how little do the people of one country and tongue know of the celebrities that are illustrious with another! Great names in literature that are household words here call forth no expression of praise or admiration among our neighbours. The dispersion of tongues at the building of the tower of Babel was an effectual extinguisher of the vanity of universal fame. Science fares better in this matter; thus literature and scientific reputations are more widely spread in geographic space—a compensation perhaps for their limited range in the countries where they originate. The poet, the historian, the essayist, on the other hand, reap a rich harvest of praise in their

own country, but must too often be content with home-made glory.

How many ordinary English readers, people of good taste and good sense, have heard of Adam Oehlenschläger? Yet he was a poet who bid high for fame, and won an equal reputation in two distinct languages—a rare feat for a poet to perform. Moreover, he was the great poet, *par excellence*, of his nation—the Shakspeare of Denmark. To hold this place is more difficult than possibly some of our readers, to whom Denmark may seem a narrow field of fame, may think. To be a great poet in Denmark, implies that the reputation of the man is more than merely Danish; it must be Scandinavian. The Swede and the Norwegian, people of nations in whom the old love of bardic lore still glows, have each a vote in granting the laurel crown. The differences between the languages of Scandinavia are not sufficient to prevent each of its nationalities sharing in the literature of the others. All these have proclaimed Oehlenschläger great. And true judges too are the people who of all others beyond ourselves understand and appreciate Shakspeare best—not even excepting the Germans. Shakspeare comes home to them. Their verdict of fame, therefore, must be accepted with respect.

Many years ago we saw Adam Oehlenschläger with our own eyes, and were honoured with a few kind words from him. It was in Norway that we met him, and there he was received like some triumphant hero. Enthusiastic students led by graver professors, solid merchants, solemn clergymen, gay soldiers, and even simple peasants, thronged in procession to offer an ovation to the bard of Denmark. We joined the procession as a stranger, and as such met the kindly poet's notice. A burly man, physically as well as mentally powerful, with a large head and intellectual visage, was this Danish bard. No puny rhymester he—but the bard of the old Scandinavian type, the kind of minstrel whose presence was joyous in the festive halls of the sea-kings.

Oehlenschläger was deeply imbued with the love and appreciation of Art. The inborn sentiment which made his countryman Thorwaldsen a great sculptor, led him to sympathise with and track out the workings of the art-spirit in the men possessed by its inspiration. Hence the zest with which he composed the exquisite tragic poem now so admirably translated into our own tongue by Theodore Martin—of all men among us the most capable to perform this difficult and tender task, one that required in its performer at once a fine knowledge and just appreciation of art with the skill and the soul of a true poet, and the warmth and freedom from pettiness of a true and earnest man. We have strong hope in Theodore Martin, who has that in him which sooner or later must come out and command the reputation he deserves.

Genius stands out noblest when honouring kindred genius. Oehlenschläger glorified Correggio in the fulness of his heart and his inspiration. The poet of the north found a grand subject for his sympathising muse in the life and trials of the painter of the south. The theme of his tragedy—Correggio's domestic bliss cursed by his envious and vulgar neighbours, and conspired against by the selfish and sensual patron-noble, the discovery of his merits by the great artists of his time, the treacherous and fatal rewarding of his opening fame, and his sad, pathetic death when earthly

glory was about to claim him for her own—though in many, happily its saddest, features apocryphal, is well adapted for poetic treatment. Throughout the drama runs an exquisite strain of tenderness, the character of Correggio as therein delineated being simple, earnest, and beautiful beyond measure. If there be a blot, it is the over-cold and utterly unpoetic nature of Ottavio, the false patron of the painter. A man with a nature so dull and frigid could not have been the admirer of the charming and virtuous Maria. All the other characters are admirably individualised and thoroughly human, whether good or evil in their ways and intents. Excellent is the contrast between the Titanic nature of Buonrotti, and the more critical and gentle and appreciating spirit of Julio Romano. The heedless slight cast by the first in his rough thoughtlessness on the humble village painter is combated and repaired by his calmer companions with unequalled delicacy. Let us quote from his act of the drama:—

"Antonio. You Julio Romano! Can it be? The famous painter? Raphael's favourite?"

"Julio. I was so.

"Antonio. And you tell me, I am no bungler?"

"Julio. I tell you, that since Raphael parted hence, Our country has no greater painter known Than you, Antonio Allegri of Correggio!"

"Antonio (*sits down*). Your pardon, gentle signor! My brain reels!"

Your words have stunned me with a wild surprise, And in the maze I cannot see my way.

All my existence, like an unknown brook,

Has flow'd along in shadow until now.

As little did I dream I could be great,

As that my powers were bent on hopeless aims.

All simply trusting to the Muse and fate,

I went on painting, and my labour thrived.

Now—in the course of one brief day—have two

Of art's most famous masters sought my home.

One strikes me down into the nether dust,

The other lifts me up beyond the clouds.

What shall I think? Is this a dream, or no?

"Julio. And if that one should say, as I have said,

What then?

"Antonio. How! Michael Angelo? Think you

That he would ever—"

"Julio. 'Tis his way to do

What no one dreams of. His impetuous spirit

Is less of God than Titan, and his greatness

Resembles that of the primeval world.

Grace is not in his nature. The younger Amor

Fires not his heart for individual objects,

But the old Eros in his bosom folds

The universe with arms of giant grasp;

No winged urchin, but a youth full grown,

All life and vigour. I will speak to him.

Rest thee at ease; I understand his ways;

The Titan has a human heart. Like Chronos,

His children still are of majestic growth,

But there is nought of cannibal in him.

He rather, like Prometheus, snatcheth fire

From heaven, to animate earth's common clay.

Let but the storm blow o'er, Antonio,

And he too will do justice to your work.

I see him coming. Go into the house."

"Antonio. I know not what to think, or what believe."

The obstinate pride of the great sculptor is

gradually mastered, and his sense of justice

awakened by the firm and feeling remon-

strances of his friend, who grapples with pre-

judice after prejudice. We wish our space

permitted the giving of the whole scene; a

fragment must suffice:—

"Michael. The man has talent, and I told him so.

"Julio. Talent! A sorry phrase; an alms we use

To fling to every beggar; is talent all

You can discover in this masterpiece?"

"Michael. The work has gross defects.

"Julio. Defects it has,

Because 'tis human. What has not defects?

Think you that you have never failed—that you

Are perfect? Is mere drawing, think you, all

That makes a painter? What is it at best?

An adjunct needful to a higher end,

But still an adjunct merely. Simple outlines

Are never found in nature; they but serve

To mark the space where body terminates.

Body itself, and colouring, and life,

With light and shade,—painting consists in these,

To blend with beauty thought, expression—this

Is genius, and are these wanting here?"

"Michael. The picture has no grandeur, none, of style.

"Julio. What do you mean by grandeur? For myself

I call deep truth, and high-toned beauty, grand.

Your works have shown us that corporeal grandeur

With spiritual grandeur may combine.

But grand conceptions do not need expanse
Of space or body, to describe the name;
In all your works a daring high sublime,
Powers of vast scope, and noble purpose breathe.
Yet man is man, and ne'er will be a god.
As man, befits him bear a child-like heart
And lowly spirit; and I will confess,
Though 'tis most certain that your bold large style,—
Perchance some natural inclination also,—
Have driven me, Julio, too, the lesser planet,
Out of my gentle Raphaelish course,
Some little towards the violent and severe,
Yet a good genial heart, which seeks expression
In art's pure forms, is, and will always be,
What most in art, even as in life, I prize;
And where I recognise its presence, there
The angel of the conscience is reveal'd, and points
With lily stem the pathway to my home
"Michael. So feel not I!"

"Julio. Your feelings take a range
Of vaster circuit. Yet the softer feelings
Come o'er you oftener than even you believe.
See your Madonna in St. Peter's, how
She sits the type of tenderness divine,
Stone though she be, her dead Son in her lap!
With human-hearted deep humility
Your Adam of the Sistine Chapel takes
Life and his soul from the Almighty's hand.
By heaven, there's nothing in man's heart or brain,
But hath at some time throbb'd and wrought in yours.
Your manner's hard; yet is your ruggedness
Only a noble, and time-hallowed rust,
And under it the soft metal shines.
Forgive me, if my words, as is most like,
Have given you umbrage; well I feel that all
Which I have said, you better know yourself.
I only spoke, the sooner to dispel
The tempest here; and sooner to relieve
This poor man of his trouble; for your words
Have quite bereft him of his cheerfulness
And self-possession; and your words alone
Have power to give them back to him again."

We must find room for one quotation more,
full of exquisite art-criticism. It is the
soliloquy of Antonio (Correggio) when con-
templating the glorious works of the masters
contained in Ottavio's gallery:—

"Antonio (enters, carrying his picture on his back). Arr-
rived at last! Good heavens, how tired I am!
(Puts his picture down, takes a chair, and sits.)
It was so hot, the road so long, the sun
So scorching! Ha! the air's refreshing here.
Ah me, how happy are earth's great ones! They
May dwell in these cool palaces of stone,
That hold, like excavated rocks, at bay
The fury of the sunbeams. Freely rise
The vaulted roofs, broad pillars cast a shade;
Fresh bubbling springs plash in the vestibules,
And cool both air and walls. Heavens! who would not
Be lodged like this! Well, so shall I be soon.
How smoothly and how pleasantly one mounts
Along the broad, cold marble staircases!
Antiques in every niche,—fine busts, that look
Serenely down with a majestic calm.
(casts a look round the room.)

This hall, too, is right noble in its style.
Ha! what is this? A fine 15th painting fill'd?
It is the picture gallery. Oh! blessed Virgin,
I'm in a temple, and I knew it not!
Here hang the glorious trophies of your art,
Italia's painters!—will for ages hang,
As rich-embazon'd scutcheons o'er the tombs
Of heroes dead, to witness of their deeds.
Oh, all ye saints, which shall I first peruse?
Landscapes, and animals, heroes, and Madonnas!
Mine eye flits round, as does a bee amidst
An hundred different flowers. Alas! I see,
For too much seeing, nought. I only feel
Art's fresh and noble presence move me deeply.
Oh, I were fain to bow me down, and weep
Within this temple of my ancestors!
Look there! That picture's beautiful! Yet no,
'Tis not so fine as first I thought it. Well,
They cannot all be choice. What have we here?
No, that's too merely pretty. In my life
I ne'er saw anything like this before;
An aged woman, furishing a pot,
Within her kitchen, in the corner, say!
A cat asleep, and, near, a white-haired boy
Is blowing bubbles through a tobacco pipe.
It never struck me until now, that one
Could make a picture out of things like these;
And yet this kitchen now, it looks so trim,
So bright and clean, 'tis quite a treat to see!
How finely the sun strikes through the green leaves,
In at the window, on the brazen pot!
Who was it painted this? Is that the name
Beneath the picture? (Reads) Flemish, hm! Unknown!
Flemish? What country can that be, I wonder?
Can it be far from Milan? Oh, look there.
At these large pictures! Tables strewed with flowers,
With glasses partly fill'd, and lemons peel'd,
And dogs, and little birds. (Starts) What have we here?
Why this is exquisite! Ha, ha, ha, ha!
Four greedy greybeards counting o'er their gold!
But what comes next? It is our Saviour's birth,
I know it well, Master Mantegna's work!
How sweetly winds the mountain pathway here;
How fine the three kings bending here before
Child Jesus, and the eternal queen of heaven!

Here is another picture, much the same,
A little quaint, but very nicely felt.
The ox on the Madonna's shoulder lays
His snout, and peers with curious wonder down;
The Moor grins kindly too,—his heart is touch'd.
The small Bambino in the casket gropes,
To find a plaything there. By Albert Durer.
He was a German, that I know. One sees,
There be good worthy men behind the mountains,
True painters, too. Heavens, what a glorious picture!
A princely dame, young, blooming, full of soul:
How the eye burns, how smiles the little mouth!
How nobly on her sits the rose-bud hat
Of velvet, and the full deep velvet sleeves!
By Leonard da Vinci. Well might he
Be called Magician;—this indeed is painting!
The next there is a king, which seems to me
Touch'd in the self-same style; perhaps it is
By Leonardo too; he painted it.
When he was young, most probably. (Reads) By Holbein.
I know him not. I know you there, old friends!
How farest thou, worthy Perugino, with
Thy soft green tone, thy figures ranged to match
On either side, thy still repeated thoughts,
And thy unflinching Saint Sebastian!
Still thou'rt a glorious fellow! Though, perchance,
Some more invention had not been amiss.
There are the mighty thrond: yonder hangs
A powerful picture, the full size of life.
A noble greybeard! 'Tis the holy Job,
Grandly conceived, and executed grandly!
That surely is by Raphael. (Reads) No. By—Fra
Bartolomeo. Ah, the pious monk!
It is not every monk can work like this.

Who could find time to look at all that's here?
There at the end a silken curtain hangs;
No doubt behind it is the best of all.
I must see this before Ottavio comes.
(draws back the curtain, and discloses Raphael's Saint
Cecilia.)
This is the Saint Cecilia! There she stands,
And in her down-droop'd hand the organ bears.
Scatter'd and broken, but the figures are cast
More worldly instruments; but even the organ
Drops silenced with her hand, as in the clouds
She hears the seraphs quiring. Her eye soars!
By whom is this? It is not painting; no,
'Tis poetry—yes, poetry! As thus I gaze,
And gaze, I see not the great artist merely,
But also the great man!
Here is sublime, celestial poesy,
Express'd in colours. Such, too, is my aim,
The goal I strive in my best hours to reach.
(Enter Ottavio. Anxiously, without saluting him, and wholly
absorbed in the picture, asks him)
This picture, whose is it?

"Ottavio (coldly). 'Tis Raphael's.
"Antonio (with joyful enthusiasm). Ha, then I am a
painter too!"

The passages we have extracted will of
themselves satisfy our readers that a fine
version of a fine work has been placed before
them. May we hope that Mr. Martin will
proceed with his renderings of Oehlenschläger,
and secure an English fame for the Danish
bard? Translations, that are beautiful poems
in themselves, as this before us is, will ever be
warmly welcomed by the world of true taste.

A Volunteer's Scramble through Scinde, the Punjab, Hindostan, and the Himalayah Mountains. By Hugo James, Bengal Army. Thacker and Co.

ALTHOUGH a residence at Darjeeling, within
sight of the snowy range, can hardly be called
a scramble through the Himalayah Moun-
tains, we may congratulate Mr. James upon
having written a lively and ingenuous narra-
tive of a very adventurous tour through
Scinde, the Punjab, and Hindostan. The
style is a little unpolished, but it reads very
like truth, and there is evidence of a nice
faculty of observation. The author started
under pleasant auspices. He was cheered on
his arrival in India with words that go direct
to the heart, and many an aspirant for similar
honours has, doubtless, been sent on his way
rejoicing, by a participation in the same
kindly welcome. On landing at Kurrachee, Mr.
James was introduced by the Judge Advocate
to Sir Charles Napier, then governor of
Scinde. "We found the hero of Meanee,"
says the author, "perched upon a high stool,
strongly resembling those used by clerks in
a London banking establishment. The Gene-

ral gave me a warm welcome, and shaking
hands in that frank and open manner so
habitual to old soldiers, exclaimed, 'Ah, I
know your brother well, only had one fault to
find with him, and that was when he married
—never you marry, and you'll make a soldier,
a soldier ought never to marry; but never
mind, dine with me at three to-day, I am busy
now, good bye;' and with this hint that he
wished to be left alone, he once more, even
before our departure from the room, regained
his desk, and appeared deeply engaged in-
specting official correspondence." Passing on
to Upper Scinde, Mr. James entered into
some of the sports of the country:—

"Few of the fish caught in this river are worth
eating; they possess little flavour, and an incon-
venient quantity of bones. The 'pullah' or Indian
salmon, however, amply compensates for the poorer
species; but even this delicious fish loses half its
value, on account of its osseous nature, so that a
ravenous epicure should be careful how he devours
the tit bits, tantalizing though it may be. Some
have not the patience to separate the bones from
the meat, but collect the roes and fabricate them
into a variety of palatable dishes. A roe curry,
such as Bombay people alone can make, is a per-
fect luxury, and worthy of being placed on a regal
table. The singular method employed in catching
these fish may amuse the reader. The adventurous
fisherman's boat consists of a large earthenware pot,
capable of containing eight or ten gallons, having
at one end an orifice about four inches in diameter,
which of course is uppermost when launched.
Over this hole the fisherman horizontally places his
stomach, so as to prevent the water from entering
the vessel; his legs are free, dangling in the stream,
and are converted into paddles for either steering
or propelling the boat. The net, which is made of
very fine though strong material, assumes a trian-
gular shape, and is attached to a long bamboo
stick. Notwithstanding the velocity of the cur-
rent, the fisherman boldly launches out into the
very centre of the river, when dropping his net
into the water, and firmly seizing the bamboo with
both hands, he carefully commences his avocation.
Often and often have I anxiously watched the
operations of these men, and trembled for their
safety, on beholding them whirling round and
round in the numerous eddies they so frequently
encountered. Yet strange to say, accidents sel-
dom if ever occurred. So light are these frail
barks, that when enough fish have been captured the
owner makes for the shore, and without any appa-
rent exertion lifts the boat upon his head, and in
this fashion proceeds homewards.

"Pig-sticking is one of the noblest sports in
India; even as these lines are being penned, fancy
raises before me the excited throng of horsemen,
nearly all mounted upon fiery little Arabian steeds,
spear in hand, waiting impatiently outside the
jungle for the wild boar's charge; three or four
hundred men, assisted by numerous dogs of all
descriptions, have already commenced beating up
the quarters of the jungle, for our hunters, who
aspire to nobler game, permit the deer, jackals, and
foxes, to rush unheeded by. Anon the cries and
noise produced by men and dog, become more
audible, nearer, still nearer, they approach. The
pig-stickers who, with almost maddening excite-
ment, are anxiously expecting the charge, strain
every muscle of the eye as they watch the slightest
waving of the tall grass, or hear the slightest crack-
ling in the thicket. With what an indescribable
sensation does each heart palpitate, until the enemy
makes his appearance; one and all raise a loud
shout, and for a time no one speaks, as the boar is
fiercely, madly pursued by the hunters; treme-
ndous is the pace for the first half mile, when per-
haps the boar suddenly turns round, his diminutive
grey eye savagely twinkling at his opponents, un-
certain who shall first taste his anger. Short is the
time allowed him for cogitation; a moment longer,
and behold yonder daring horseman, together with
his steed, are rolling on the field. Quick as thought,

another rider takes advantage of the moment, and plants a spear very gently in the back of the boar. The ice once broken, spear after spear follows in rapid succession, but the foe has no intention of tamely yielding up his life; he likewise watches his opportunity, and singles out another of his tormentors, whose horse, swerving through terror, offers too tempting a chance for the hog, who forthwith rushes savagely at the steed, ripping it up, and bringing horse and rider to the ground. But still the odds are fearfully against him; vain are his efforts to gain a neighbouring slip of jungle, loss of blood deteriorates from his speed, and again he is obliged to face his pursuers: with bloodshot eye and foaming mouth he makes a fresh attack, which is repulsed by some experienced hand; raising himself with difficulty and pain, again he flies at one of his foes, and again is vanquished; slowly he sinks down, willing even yet to make a charge if it were possible, until finally he gloriously bites the dust, dying game to the last.

"We often visited a large jheel near Roree, it might be almost styled a lake; nor had we ever just cause to complain of the paucity of wild fowl shooting on its waters. When disturbed, clouds of birds would rise from amongst the weeds, jungle, and water-plants, so that even a very bad shot was enabled to bag as many as he pleased; we were all in those days as strong as young elephants, our health unimpaired, and spirits as buoyant as corks; the scorching rays of the sun, the deadly climate of Seinde, were alike nought to us,—away we tramped, wading up to the waist in water, popping at and turning over the feathered race in quick succession. Look at yonder brahminne flying towards us, bang—bang, and with a splash, headlong he falls into the lake; and now we can obtain a closer inspection of his lovely plumage; how soft and clean his milk-white breast. But faith 'tis getting hot, so here, Mohammed, let us retreat to yonder bush, just verging on the margin of the jheel, and there under its boughs we shall find grateful shelter.

"Ah! 'tis well; now that we are all seated, hand us your wallet. No, not that, you stupid pégal (foolish fellow), it is not powder and shot that is now required; hand us over the other one suspended from your kummerbund—good, now then examine the contents; a couple of cold ducks, a brace or two of teal, and a few slices of ham, the usual complement of bread and cheese, and in that little flask you will discover something a wee bit stronger than water; how one enjoys these sporting pic-nics, how pleasant the return home in the cool of the evening! But occasionally, instead of visiting our favourite jheel, we mounted our horses and hunted the jackal, or if fortunate, coursed a fox or hare; true for you, dear reader, neither dogs nor foxes could equal dear England's breed in speed or bottom. What did that matter; we derived some amusement, though our pack consisted of a set of mongrel dogs."

Mr. James relates the particulars of a curious interview with the Nawab of Ahmedpore, but we must pass on to his account of the part he took, with Major Edwardes, in the siege of Mooltan:—

"On one of our excursions we wandered so far that the shades of night surprised us ere we arrived near home, and on approaching the camp, the cavalcade were mistaken for a body of Moolraj's sows. The large guns were immediately run out, and half the army mustered to arms, presenting us with a bullet or two. This warm reception from one's own friends proved anything but agreeable, nor was it a mode of death we either calculated upon, or bargained for. To fall sword in hand, facing the foe, was natural enough; but to be shot down like dogs by your own soldiers, changes the affair vastly. One fellow took a deliberate aim at my head, and fired, but luckily the ball flew wide of its mark. Being satisfied that all the outposts were on the alert, and their front clear, we returned to dinner.

"This was the most agreeable portion of the day; all assembled round one table, and the adventures recently encountered were told over again; occasionally our vocalists warbled a love ditty, or amused

the audience with comic songs of every variety, from 'She's all my fancy painted her,' to 'The great Sea Snake,'—the latter being invariably called for. Then came Cortlandt's band, who sent forth martial strains of such an harmonious nature, that we were compelled to retire and repose in imagination upon their melodious notes. Sometimes, instead of taking equestrian exercise, we played quoits, or tried who could hurl an 18-pound shot the farthest. If not inclined for manual exertions, we quietly strolled through the camp, visiting the wounded; and were often amused for a quarter of an hour or so, by watching the soldiers cooking their evening meal,—an operation, which, poor fellows, they performed with great gusto. As nearly all the men in camp prepared their own dinners, over a separate fire, the smoke from these little cookshops was an intolerable though unavoidable nuisance. When the cold weather set in, the offence increased, for during the entire night, large fires were perpetually spreading dense clouds of smoke over the camp, and no doubt this was the cause of several cases of ophthalmia, which occurred subsequently. It was worth one's while to observe a group shivering with cold, although squatting almost upon the fire itself, the light of which, playing upon their dark swarthy faces, gave them the appearance of bandits.

"On Sundays we all assembled in Edwardes's tent to hear him read prayers, nor can I remember that ever, during our camp life, we neglected the observance of the Sabbath day. The familiar services, under such circumstances, make a great impression on the mind; and our tent on these occasions would have formed an admirable picture.

"Congregated in our native costume in one small place, we sought the aid of Him who hath promised that, when two or three are gathered together in His name, there will He be in the midst of them. And thus we passed our happy gipsy days, free from troubles, internal strifes, and the plottings of insincere friends. Thrice fortunate is he whose lot allows him to enjoy the society and sincere friendship of such disinterested companions, as those I was associated with in Edwardes's camp. One of Moolraj's devices to encourage his soldiers, was to spread a report that he had determined to risk another encounter with his enemy. Sunday was the day generally recommended by his soothsayers, as being the most propitious for attacking our camp. These rumours were so frequent, that eventually but little attention was paid to them, though of course precautions were taken that, in the event of such an occurrence, our men should be prepared for the conflict. However, on one occasion, just after divine service had been performed, the enemy made such a formidable demonstration, that Edwardes deemed it advisable to turn out the force. As soon as it was decided to give battle, orders were issued accordingly, and the entire camp prepared for action. The turbulent scene baffles all description: tom-toms were beating, bugles sounding the alarm, horses neighing, men shouting as they rushed through the mass of soldiers carrying orders, artillery dashing out of camp, and innumerable flags waving, many of them bearing the insignia of a bloody hand. Then came the cavalry raising a cloud of dust, the whole forming a tableau neither easily described nor imagined. On clearing the encampment the line moved on, and having advanced almost within range of the fort guns, the order was given for a halt,—again we advanced, but the enemy retired, unwilling to try their strength."

The siege of Mooltan is described with many particulars of interest not hitherto recorded:—

"The enemy's outer fortifications were by no means contemptible—several mines were laid and ready for immediate explosion; beneath both breaches well constructed mines were discovered, containing large quantities of combustible matter, whilst a couple of desperate men lay concealed under ground, resolving to die for their unfeeling master. Besides these preparations for resisting the British, Moolraj had mounted four guns so as to enfilade the breaches, and these batteries were further strengthened by a ditch excavated in their

front, the whole of these internal works being well protected from our artillery. In rear of the first wall another, much higher and almost as strong, had been erected, and in the rear of that again, a formidable loopholed wall had been built, enclosing three or four large mosques, besides other brick buildings, that afforded admirable temporary shelter for those resolute men who were determined to fight to the last. All these preparations might have disturbed the nerves of a weaker foe, but what power can withstand the indomitable courage of British soldiers? There stood the brave sons of dear old England with fixed bayonets, and as impatient to 'charge up the breach as hounds held in a leash. But the Almighty had mercifully ordained otherwise; the demon of carnage was deprived of his prey, and unwillingly forced to retreat to his own miserable abode. A small white flag was now perceived waving over the ramparts, and a whispered rumour hurriedly spread through the trenches to the effect that Moolraj had unconditionally surrendered to the General.

"The report proved true; crestfallen, and with a countenance upon which suffering, anxiety, and fear were strongly depicted, forth rode Moolraj from under the gateway, and the murderer of our poor countrymen became a prisoner. Though some time had elapsed since the perpetration of the crime, still justice, though tardy, had at last overtaken the rash and cowardly deed. When we consider Moolraj's detestable conduct, who can refrain from contrasting the treatment he experienced at the hands of the British general? Had the Afghans, or any other native force, been in General Whish's position, instantaneous execution would have followed Moolraj's capture.

"On entering the citadel, the artillery were again congratulated by all who witnessed the devastation they had committed, particularly in the interior of the fort. All around appeared in the same state of dilapidation as the town; one or two domed buildings, confidently reckoned upon as shell proof, were perforated through and through with ball, and even Moolraj's own private dwelling was not suffered to escape. The Europeans who first entered the fort were not long in discovering a few chests of beer, which it is needless to state disappeared like a flash of lightning. The treasury fell into the hands of the prize agents. Having cleared the fort of all suspicious characters, a loyal salute was fired in honour of the victory, and a day or two after tranquillity was restored, and shopkeepers again resumed their business.

"Brigadier Markham nobly sought out the enemy's wounded, affording them assistance, providing them with food, and obtaining medical aid for those in need of it. The prisoners, with the exception of the principal offenders, were confided to Major Edwardes's care, and a miserable condition the wretched fellows appeared to be in; however, on searching their persons, gold and silver coins, amounting in a few cases to a thousand rupees, were discovered amongst their clothes, or concealed in their long thick hair. The sole of the shoe was a favourite place for secreting the small gold coin issued by the Dewan, and valued at one rupee. Many of our prisoners, on perceiving the strict investigation going forward, buried what treasure they possessed previous to being searched, whereupon several of our own people, who had detected this manoeuvre, dug it up again fast enough. All articles of value were taken from the vanquished, who, by-the-by, after the searching was concluded, were confined in the various temples, buildings, and enclosed gardens that lay scattered about the suburbs. These unfortunate individuals might have numbered between two and three thousand; many, to judge from their miserably lean appearance, must have fasted longer than the faculty would deem consistent with the demands of nature. But, it should be observed, that no sooner were they confided to Edwardes's care, than the utmost endeavours were used to alleviate their sufferings, and render them tolerably comfortable; nor were they long kept in confinement, for each person receiving a rupee, was permitted to depart, and go where he liked. Certainly a few, too proud

to accept any gift from their conquerors, refused the pecuniary assistance proffered them, and when the brave fellows were compelled to surrender their weapons, it was really beautiful to see the noble expression that accompanied the action; it was a look that seemed to say 'Had we been consulted you should have decimated the whole of us ere you took possession of the fort.' Yes, none could help feeling for our vanquished foe.

"Thus ended this ever to be remembered siege—a siege conducted with consummate skill and energy.

"On entering the shattered city, now sadly deserted whilst the streets were miserably filthy, one could not help feeling for the wretched inhabitants who had been obliged to remain within the walls. Aged men with long grey beards, lads in the prime of life, together with a few women, were weltering in their crimson gore; whilst some of the bodies lay buried in the deep mud that had collected and been suffered to remain in the streets. Most of the deceased owed their untimely fate to our shells. But to describe such heart-rending scenes of bitter anguish can afford no pleasure to the reader.

Wives and mothers, the very pictures of unutterable woe, were struggling through the slimy mud in search of their husbands or other near relations. The ghastly corpses were already denuded of all clothing, and with wide gaping wounds presented a most appalling spectacle. Horses, donkeys, and camels crawled along or sunk on the ground to die where they fell, their carcasses filling the air with a horrible effluvia. In many of the houses, particularly those of two or three stories, several of Moolraj's soldiers met their death; too late to escape out of the town the poor fellows barricaded the doors, and entertaining the idea that the victors would offer no quarter, fought with desperation to the last. Here and there in some less frequented locality, a pariah dog might be seen feasting upon a human corpse, and being disturbed from his horrid meal, would reluctantly retreat to a short distance, and then with gory fangs and blood-shot eyes, kept up a low snarling growl until his annoyances had departed, or the dog himself received a bullet in his loathsome carcass; the latter mode of stopping his mouth being generally adopted if a European perceived the creature at his disgusting repast. No spectacle shocks the feelings of a civilised man more than that of witnessing one of his fellow-creatures being devoured by an animal. The buildings were in a sadly dilapidated state, many were uninhabitable, and few indeed remained unscathed from the murderous effects of our shells. For a short time after the capture of the city nearly all the tradespeople deserted their business; however, the generous forbearance of the troops soon restored confidence amongst those who had been hardly enough to reside in their houses during the siege. Long before the termination of the war those inhabitants who had quitted the city in alarm returned to Mooltan, and carried on business as if nothing had interrupted them.

"Dr. Cole established a hospital for all who felt disposed to seek his aid; the wounded prisoners gladly availed themselves of this kindness, and the nourishment, combined with his skill, soon relieved most of the sufferers. In fact too much praise cannot be bestowed upon our charitable doctor, who strove his utmost to relieve the agony of his patients, no matter whether friend or foe.

"The prize agents now commenced seeking after and collecting treasure, or whatever valuable property fortune spread in their way, but they did not reap such a profitable harvest as was expected. The wealthier inhabitants, who had escaped from the city ere it fell into the hands of the besiegers, either carried away their property with them, or buried it in some secure place of concealment that defied all chances of discovery. Occasionally a 'ready made mine,' as the European soldiers termed a hidden box of gold, would be dug up. Silks and satins were collected, besides a variety of other articles, including a quantity of brass utensils. Manifest were the localities wherein the people concealed their treasure; some would insert 3000 or 4000 rupees in a hole, neatly excavated in the

wall of their house; others preferred throwing their money down a well. In fact, to describe all, or even nearly half of the places devised for the concealment of property, would occupy a whole book.

"The troops on city duty were now provided with comfortable quarters; those guarding the gates resided in very commodious and snug habitations, in comparison with the tents that had only half sheltered them for the last five or six months. The city having fallen, active preparations were made towards capturing the citadel. I obtained a lovely view of the fort previous to its destruction, and it really looked beautiful; its clean white wall decked here and there with dark green trees was so pretty, that the gazer could not refrain from lamenting over its coming fate. The white smoke from the guns, gracefully curling over the ramparts, added to the picturesque effect."

Mr. James has a few notes on Darjeeling, its society, sports, &c., but they might have been written with more care. We extract the following:—

"Through the unwearied exertions of the Superintendent, Darjeeling can boast of an excellent bazaar, containing several shops, mostly tenanted by Hindoos, from which a tolerable supply of every necessary may be procured throughout the year. A few good carpenters and artisans from the plains have been induced to take up their quarters in this bazaar; but they demand high prices for their labour, aware of the superiority of their work over that of their fellow-workmen of the hills. The bazaar and suburbs contain a mixed population of upwards of 4000 inhabitants; the huts, altogether devoid of architectural pretensions, are indifferently constructed of bamboo, and thatched with the same, split into pieces two feet long by an inch broad. Some of the wealthier inhabitants shingle their houses; this is done by nailing bits of wood to the beams, in the same manner as slates are fixed to the roofs of English houses.

"The 'reading-room' at Darjeeling has obtained its title by courtesy only, presenting a melancholy spectacle of empty shelves, excepting those occupied by stray numbers of old reviews, or monthly publications, together with a well-fingered army list, and Calcutta almanac. However, not to be a member of the above institution, would be considered as betraying literary indifference, and a want of public spirit. Darjeeling society is placed on a footing entirely its own, and no digression is tolerated from the forms laid down. Should any visitor attempt an innovation upon established usages, his proceedings would be regarded with universal disapprobation; whilst everybody exclaims, 'La, what a remarkably strange man, Mr. So-and-so is.' Like all other hill stations, Darjeeling rejoices in its scandal groves; and the objects of ridicule or blame, generally have communicated to them the opinion of the community at large, for which information he or she has to be grateful to some officious friend, who like a bird of ill omen takes delight in hovering over his pretended friend's abode, anxiously on the alert to be the first to convey unwelcome news. Unfortunately, India swarms with these pests of society; these social vultures, who would unhesitatingly dip their foul beaks into a mass of corruption, provided they could pick therefrom a few morsels to make a meal. The greatest excitement prevails when a new face makes its appearance on the Mall; everybody is in a ferment to ascertain who the individual can possibly be; what class of society he moves in, or whether he moves in any at all; until at last the grand mystery is solved, and the new arrival takes his place as an acknowledged Darjeelinge.

"The ennui of the station is occasionally dissipated by balls got up by general subscription, or hospitable residents entertain visitors at their own houses. These parties are carried on with more spirit than those in the plains; every individual is expected to dance; all lounging on sofas or chairs is interdicted, until the requisite number of dancers are made up; and such a rarity as a wall-flower is seldom seen. The musicians are generally procured from the bar-

racks, and play waltzes, polkas, &c., in rapid succession, whilst the dancers are in no way behind them in zeal and activity. The ball-room at Darjeeling possesses this advantage, that it can dispense with that artificial air-cooler, the punkah. This enormous fan not unfrequently causes much annoyance to the ladies, for being kept perpetually waving to and fro, it interferes considerably with the arrangements of the head-dress. At Darjeeling the punkah is unknown; and the nights being excessively cold, dancers prefer closing the doors and windows, instead of throwing them wide open. A cloud will perhaps uninvited visit the ball-room, but this only 'lends enchantment to the scene.'

"Ladies in the hills are not confined to the house all day as in Calcutta. Paying morning visits, pic-nics, and shopping, assist in passing away the time. The latter, as may well be imagined, is the most expensive amusement of all, for no place in India comes up to Darjeeling in the price of European goods. Mr. Martin's shop used to be the best conducted repository for these; and a large party generally congregated to make purchases, inspect recent additions, and of course talk scandal; the latter originating in the lively imaginations of the gentlemen, and left to the lady confidante for circulation, who no doubt sets out on a visiting expedition purposely to have the felicity of retailing the newest scandal. The goods offered for sale are of every description; jams, preserves, lobsters, oysters, soups hermetically sealed, being in great request are charged accordingly. Bachelors alone are foolish enough to indulge in these costly luxuries. A pot of jam that cost two or three shillings in England, at Darjeeling would sell for six rupees. On the rumour of the arrival of a fresh stock the well-known shop is taken by storm—the assailants being of both sexes. Mr. Martin, the obliging owner, may be perceived hurrying to and fro, answering innumerable questions, but at the same time contriving to dispose of his various wares with such celerity as would excite the envy and cupidity of the native itinerant box wallah, alias pedlar. Ladies attack bales of muslins, dresses, &c., with characteristic pertinacity, and insatiable curiosity; whilst the bachelors pounce upon whatever strikes the fancy, not for a moment considering whether such purchase is, or ever will be, of any service to them. An acquaintance of mine, far more mischievous than all the children put together, once bought a score or two of trumpets, and presented each child he met on the Mall with one of these toys. The result was far from 'a concord of sweet sounds'; and the noise and annoyance thus created, brought upon the author a severe penalty.

"As far as regards shooting excursions in the hills, camp equipage and domestic establishments should be reduced as much as possible. Towards the Bootlea frontier, where the mountaineers are capable of carrying great burdens, two attendants will be found sufficient; and in the way of provisions, a side of bacon, a hump, or tongue by way of change, a pound or two of tea, rusks, and a short allowance of brandy. Perhaps the most important part of the hill sportsman's equipment may be a couple of thick country blankets, one to act as a bed, the other to wrap the guns in, as being preferable to gun cases.

"Those who have never frequented mountainous districts can have little idea of the fatigue attending the descent of a cud, aggravated not a little by the stinging nettles, the thick stems of which, the size of a man's arm, bristling with prickles, inflict terrible punishment, if unluckily a false step or sudden jerk send them in your face. Raspberry bushes, creepers, and the prickly cane impede the hunter's progress considerably, besides disfiguring his personal attractions. I fancy I hear the reader exclaim, with a sneer, 'and this is what you denominate Indian sport!' 'Bide ye yet,' is the reply. 'Ah! my friend—I told you so—look at yonder cave; take care, here she comes,' and true enough our rushes a noble female bear, betraying by her vivacity the possession of two or three cubs. One barrel is fired, another follows its example, the

rifle then discharges its contents. If all be unsuccessful it is a regular 'case.' Down charges the old bear, head over heels, or 'all of a heap,' as the saying goes, and then knives come into play. Reader, once and for all, if you wish to shoot a bear, do not pitch your tent some three miles from the station, in order to be within reach of luxuries; no, for once in a way, let the blue firmament of heaven, or the clouds, be your only canopy for a day or two; never mind marring the beauty of your physiognomy by bramble scratches, or falling down a hole, for rest assured that with patience and a little skill, the above is the only way to shoot hill bears.

"From the commencement of the rains, when the 'Terai' is mostly under water, tigers take up their quarters at the foot of the hills; but owing to the malaria arising from the jungles Europeans never venture to attack them in their insalubrious haunts. The natives, however, urged on by pecuniary motives, set snares for them, and by taking the skins to the superintendent's office, receive for the same five rupees, a sum much under that obtained in Scinde, where thirty rupees are bestowed as a reward for killing a tiger. A native rarely enters the lists in personal combat with these animals, but prefers the less dangerous mode of capture by stratagem. A favourite method, and one which seldom fails of success, is to plant sharp poisoned arrows in a sloping direction, amidst the long grass and shrubs. A number of men then draw themselves up in a line, and with shrill, unearthly noises, accompanied by the unceasing 'tom, tom,' commence beating the jungles. The frightened animals rush headlong through the bushes, until a concealed arrow pierces their flesh; the poison being of a very deadly nature soon takes effect, and after wandering about for a few minutes, the wounded creature drops down dead. Deer also are frequently snared in this manner.

"Many of the residents during the cold months leave Darjeeling, with its frosts and snows, to enjoy a huntsman's life at the base of the mountains. Bullocks and buffaloes are always grazing in the Terai; so that tigers at all events have no cause to complain of the paucity of prey. The Terai abounds with every species of game, whilst fishermen can enjoy their peculiarly English pastime either with or without the fly. This is rarely employed with success in the Bengal rivers, as the fish seldom rise to an artificial bait. In some of the hill streams noble specimens of trout leap over falls and rocks with wonderful agility."

The first sight of the great Himalayah range seems to have impressed Mr. James, as it must do all travellers, with a wondrous sense of its stupendous magnificence:—

"Those who are anxious to behold the noblest efforts of nature, should visit the Himalayah mountains. The grandeur of the scenery, diversified as grand, baffles description; and scarcely a spot in the world can surpass in beauty this glorious range. The loftiest flights of imagination must fall short of the exquisitely beautiful view of the snowy mountains from Darjeeling. For some days after my arrival the weather continued so cloudy, that the perpetual fogs, and hazy state of the atmosphere, prevented me from obtaining even a glimpse of the snow-clad peaks. One morning, however, during the course of a pedestrian excursion, just after turning a sharp angle, the whole of the snowy range burst suddenly into view. At first I could scarcely believe my senses; but thought the awfully grand panorama thus stretched before me must be the work of imagination; the chimera of a feverish, or sickly constitution. For a long time I stood gazing up and along the stupendous icy barrier; and when retracing my homeward steps, kept continually turning round to obtain another look at the splendid prospect. Until lately the height of the Himalayahs was a disputed point; some asserting that none of the peaks reached a higher elevation than that of Dewalghur, 27,000 feet above the level of the sea. But Mr. Smart, attached to the survey department, has within the last few months returned from ac-

companying Captain Sherwell's expedition, and very kindly placed at my disposal some tables relative to the altitude of the higher mountains round Darjeeling. On referring to these it appears that the loftiest peak seen from the Sanatorium, and denominated by the natives Kunchinginger, is 28,176 feet, or upwards of five miles above the level of the sea. To describe, or even to give any idea of this majestic peak, whose towering heights pierce the clouds, is altogether beyond my power. It seems a fit emblem of the pure road which leads to heaven. At about the height of 18,000 or 20,000 feet commence the regions of perpetual snow, so that a huge mass of some 8000 feet, consisting it is supposed of nothing but frozen snow and hard rock, towers above its neighbours."

The height of this mountain, 28,178 feet, was ascertained, more than five years ago, by Col. Waugh, Surveyor-General of India, and published by Dr. J. D. Hooker, in 1849, in the introductory preface to his 'Rhododendrons of Sikkim Himalaya.' From the same source Mr. James may also learn that the hills and valleys of Darjeeling have already been the scene of extensive botanical researches; and we may add that nothing but the parsimony of the Government, and their slow appreciation of scientific labour, have prevented the fruits of these researches being published to the world in a style worthy of their importance.

The History of Wales, from the Earliest Times to its final Incorporation with the Kingdom of England. By B. B. Woodward, B.A. Hall, Virtue, and Co.

MR. WOODWARD'S 'History of Wales' is a work of considerable research, and will be valued by the historian, the archaeologist, and the antiquarian, whether the subject treated of be the origin of the Cymry as a people, their many and fierce struggles for independence, which though ultimately unsuccessful, were long a source of annoyance, and often of considerable loss, to their Saxon invaders; of their ancient kings and early rulers—men of whom it may be truly said—

"Their deeds were great in fight;"—

of the bards, their various myths and legends; of the Druids, and their gradual subversion in favour of the milder and more genial influences of Christianity; or of their early legislation under the sway of such princes as the renowned Arthur, or the beneficent sovereign of the Triad, Howel dda. These and the many and various incidents growing out of them, constitute the main features of the work before us. The narrative will be read with interest by all, but more especially by such of the natives of the principality as take a pride in acquiring a knowledge of the deeds and fame of their forefathers; and, thanks to the establishment and perpetuation of the national and still popular Eisteddfods, or bardic meetings, the number of such appears to increase rather than otherwise.

Mention has been made of Howel dda—(Howel the Good, in English); an extract or two from the laws which, if not originally enacted by him, were in force in his day, may amuse the reader:—

"The laws of marriage may be considered the most important: we will, therefore, commence with them.

"Women were marriageable at the age of fourteen, or even twelve years. On the marriage, a fine was paid to the lord, either by the person who had given the maiden in marriage, or by herself, if she had disposed of her own hand. Before rising

on the morning after the wedding, she bargained for a fee from her husband; unless claimed and settled at that time, he was not answerable for it. If the married persons agreed to separate before the end of the seventh year, the woman was to be paid back her dower, her maiden-fee, and whatever ornaments or personal possessions were hers at her marriage; unless the separation took place at her own instance, when she had only her maiden-fee, and any fine which might be due to her, as compensation for the husband's unfaithfulness to her. But if it did not happen till after seven years, wanting three nights, all the personal property was to be divided into two portions, the law assigning certain things to each, and all that the law had not assigned, the wife was to share, and the husband to choose which part he liked. We can only give an illustration of the legal assignments in such a case of separation. The children were divided thus: two to the father, for one to the mother; the oldest and the youngest to him, the middle one to her. The swine to the husband, the sheep to the wife; or the sheep to him, the goats to her; but if there were only one kind, they were to be shared. All the milking-vessels and dishes the wife had, except one pail and one dish, which were the husband's; the drinking vessels were all his. He had the riddle, she the small sieve; the upper stone of the *quern* (or handmill) was his, the lower belonged to the wife. The bed-clothes were divided in the following manner: the bolster and coverlet to the husband, and the lower bedclothes; the upper bedclothes to the wife; but if the husband married again, the under bedclothes were given up to the former wife, and a fine was charged upon the second wife if she slept upon them. The domestic implements were the wife's; such as the axe, the auger, &c., were the husband's. All the poultry and one cat were his; the other cats the woman took. The cloth not finished was divided; but the balls of yarn were allotted to the children, and divided if there were none. The wife had all the meat and all the cheese in brine; all the butter, cheese, and meat in cut; and as much of the meal as she could carry between her arms and knees from the store-room into the house. And she was not to leave the house for nine days, so that the separation might be pronounced legal; and then every penny of her property was to accompany her, a car and a yoke being allowed to carry it away. As soon as the husband married again, the separated wife was free. But if, after the separation, she should be on the point of being married to another man, and the husband who had put her away should repent, and wish to have her again, if he overtook her with but one foot in her new husband's bed, he might claim her as his own."

"Landed property was shared equally amongst all the sons, a given quantity being allotted to each tenement upon it; or if there were no buildings on it, the youngest son divided all the patrimony, and each of the sons chose his portion, beginning with the eldest. After the death of the brothers, their children might, if they would, divide the whole patrimony anew; and in the same way might the children's children equalise the division of the family estate; but afterwards no new distribution, or equalisation, was allowed. A daughter had only half the share of her father's property which fell to the sons; but if there were no sons, the daughter might, by the laws of Dyfed, inherit the whole estate. A son born before the marriage of his parents did not share with those born in wedlock of the same father and mother; and a blind, deaf, dumb, or maimed man, could not inherit land. There were, moreover, restrictions on the power of making bequests of personal property; the equal division of the land amongst the sons, to the third generation, and the assignment of only a half share to a daughter, are, however, the most remarkable laws on the subject of inheritance. The former of these customs prevailed amongst the Saxons, and was called, as is well known, *gavel-kind*. This technical term has by some antiquaries been claimed for the cymry; and a meaning has been assigned to it which would indicate its Welsh origin. Un-

happily for this claim, the word alleged to be its parent is not employed in relation to land, so as to connect it with this custom; whilst the phrase itself, and a sufficient *etymon*, are both employed in Saxon legislation; and as the custom was not borrowed by the Teutonic invaders from the Britons, it is most superfluous to suppose that its technical appellation was so obtained.

Various other laws and customs relating to landed property, to theft, fire, murder, &c., are then enumerated, but our limits will not admit of particularizing them; so pass we on to 'Bard and Bardism,' of which Mr. Woodward furnishes rather copious details, though our extracts therefrom must necessarily be brief. The following are from the Triads, though of their actual date but little seems to be known:—

"The seven questions proposed by Cattwg Ddoeth to seven wise men in his college at Llanveithin, with their answers,—

"1. What constitutes supreme goodness in a man? Equity.—*Tallhainn the bard.*

"2. What shows transcendent wisdom in a man? To refrain from injuring another when he has the ability.—*St. Teilo.*

"3. What is the most headstrong vice in a man? Incontinence.—*Arawn ab Cynwarch.*

"4. Who is the poorest man? He who has not resolution to take of his own.—*Tallievin, chief of bards.*

"5. Who is the richest man? He who coveteth nothing belonging to another.—*Gildas of the Golden Grove.*

"What is the fairest quality in a man? Sincerity.—*Cynan ab Clydno Eiddin.*

"7. What is the greatest folly in a man? To wish to injure another, without having the power to effect it.—*Ystgfan, bard of Teilo.*"

'The Sayings of the Crow,' supposed also to be by Cattwg, will amuse by their quaintness:—

"The crow her sayings in a valley sang,

Whilst seeking for her grain,—

Learning not followed, learning is no more.

"The crow her sayings with the dawn thus sang,

To such as sought her nest,—

Matters not his no wise man e'er will touch.

"The crow her saying solitary sang,

And far was heard her voice,—

The brave man every chance will overcome.

"The crow her saying to her young one sang,

Of such as liv'd together,—

All things will love and follow with their kind.

"The crow her saying prudently would sing,

To those who heard not reason,—

Useless a candle is unto the blind!"

"Amongst the 'tricks' of Welsh poetry," observes our author, "not one is so frequent as the commencing of line after line with the same word, or words, or with derivatives or compounds of the same word. We have mentioned this on more than one occasion. And next in frequency is the adoption of some one termination, so that very many lines together will rhyme with each other. Illustrations of these peculiarities are not required; the following from Iolo Morganwg's Poems will exhibit another characteristic rhyme in Welsh verse; it will be observed, that beside the alternate rhymes resembling our own, the word in the middle of every second line rhymes with that at the end of the line preceding it:—

"We wisdom seek, and calm content,
They both frequent our dwelling;
From these a deathless comfort springs
The joys of kings excelling.

"There's one who rules this earthly ball
Bestows on all his favours;
His providence we firmly trust
To crown our just endeavours."

"Another variety presents stanzas of four lines rhyming together, but the rhyme of the first line occurs in the penultimate foot, instead of at the end; and sometimes, apparently by the necessity of the verse, this occurs in poems not divisible into stanzas. This example will suffice to illustrate the structure of a stanza thus framed:—

"Gwynedd! for princes gen'rous fam'd—and songs,
By Gruffydd's son unsham'd
Thou art; he, hawk untam'd,
Is prais'd where'er thy glory is proclaim'd."

"Far more complicated is the following:—

"Fair as flow'rs at spring's renewal,
Blythe and sportive, never cruel,
Glancing brighter than the jewel;
Alas, the jewels!
Alas, the jewels!
Jewels are a false adorning, &c."

A list of the most celebrated Welsh bards, some of ancient, some of modern date, is appended, but for these we must refer to the work.

"The translations of the Old and New Testaments are the most important prose works of these ages. These were ordered by Parliament as early as 1563; but, eventually, were not brought out, either at the time, or in the manner appointed. William Salesbury, one learned in British lore, assisted by Richard Davies, Bishop of St. David's, and Thomas Huett, published the New Testament in 1567 A.D.; and twenty years elapsed ere the Old Testament appeared. This was rendered into Welsh by Dr. William Morgan, of Llanrhaiddr (afterwards Bishop of Llandaff, and then of St. Asaph), with the help of Dr. Powell (editor of 'Lluyd'), Dr. Gabriel Goodman, the bishops of Bangor and St. Asaph, Dr. Edmund Prys, Dr. Richard Vaughan; and was sent forth in 1588. Dr. Parry, Bishop of St. Asaph after Morgan, finally revised the whole; and that version, first published in 1620, has been the standard translation in the Cymraeg.

"The other works are more modern, and are principally theological and polemical essays written for, and appearing in, periodical magazines. Several prize essays on questions of history and antiquities have been published under the auspices of the societies established for the investigation of those subjects; and the 'Hanes Cymru,' 'History of Wales,' by the late Rev. Thomas Price, of Crickhowell, is a work of higher pretensions, and far greater value, than any other which the Principality can show of its own growth. It is a fact of great significance, that there was not a printing-press in the whole of Wales, till about the year 1735; and of equal significance is the contrasted fact of the production of the splendid volumes of Lady Charlotte Guest's 'Mabinogion,' at the Llandovery press of Mr. William Rees, in these last few years.

"The revival of the *Eisteddfodau*," as already observed, "though it cannot give life to the bardic system, may promote a healthier and sounder spirit of research amongst the Welsh antiquaries, than they have commonly preserved; and indeed, it has already done so, and many works might be referred to as indicating the progress of a catholic and critical, though genial, method of inquiry into the alleged records and the undoubted memorials of the past, which even if it should prove unable to bring it back to us living and human, will surely prevent the mixture of fiction with fact, and the consequent misrepresentation and destruction of both, which have hitherto characterized all essays towards the history of Wales. * * *

"A sign of still brighter hope we discover in the custom now (may we say?) established, of writing books of wide and perdurable interest concerning Wales, in English, and of accompanying the editions of ancient records by *English translations*. Nothing has contributed so effectually to involve in impenetrable darkness the story of the affairs of *Cymru*, anterior to the conquest by Edward I.; or has so hopelessly condemned her choicest poetry to remain, to this hour, unknown to those who would most heartily have appreciated it, as the jealousy with which they have been held imprisoned in the *Cymraeg*—a language that to us of Saxondom, most unlike the walls of convent or seraglio, has afforded not the slightest hint of the worth and beauty that were hidden behind it. Not to compete with the classic history and literature with which all ages and lands have replenished our stores of intellectual wealth, do we desire to see the possessions of Wales rendered accessible to

the English student; but because we know that every addition to such treasures enhances the value of those already accumulated; and also, because the owners of the unexamined hoards have been, these many generations, so intimately united with us, that until we have made them our own, we lie under the censure of that judgment of Cicero, which was selected as the motto to the 'Cambro Briton,' *Nulli quidem mihi satis eruditi videntur quibus nostra ignota sunt*: 'I can esteem none as well informed, to whom matters pertaining to their own country remain unknown.'

We must now take leave of Mr. Woodward, thanking him for his great, and in many respects successful exertions in the somewhat stubborn soil he has selected for his literary explorations. The work is admirably got up, and the illustrations, "thick as blackberries," are both ornamental and useful.

NOTICES.

Sunday Scenes in London and its Suburbs. With Illustrations by Percy Cruikshank, from Sketches made during 1853. Reeves and Son. THE author's object in publishing this work is no doubt very philanthropic and very laudable, but we cannot much commend either the skill of the artist or the taste of the writer. Of some of the discreditable and humiliating Sunday Scenes in London faithful pictures are given, and Mr. Cruikshank is probably right in ascribing many of the evils to drinking and smoking, against both of which forms of sensual indulgence his philippics are energetic. But the remedies for existing evils are not so simple as the author supposes, and his manner of urging them is not likely to produce a good impression. Mr. P. Cruikshank ought to think it possible that those who differ from him as to Sunday occupation are actuated by benevolent and honourable motives. If the highest duty of man were to take care of his bodily health, and to cultivate his intellectual and artistic tastes, there would be no hesitation about throwing open all places of instructive amusement on Sunday, but there are other aspects of human nature taken into consideration by those who believe in the doctrines of the Christian revelation, suggesting reasonable arguments on the opposite side, worthy of being met in a different spirit from that in which they are here dealt with.

The Cross and the Crescent as Standards in War. By James J. Macintyre. A. Scott.

MR. MACINTYRE narrates with considerable historical knowledge, and describes with iconoclastic zeal, the origin, progress, and abuses of the sign of the cross, more especially when employed as a warlike emblem. He considers that the association of this visible symbol with persecutions, wars, and conquests, and its connexion with Popish idolatry, form a great obstacle to the spread of Christianity, and to the peaceful and holy influence of those revealed truths of which the cross is taken as the emblem. The following summary is given of the objects which the material cross represents, and the various meanings it expresses. First, it was an instrument of torture and death, and became thus the symbol of cruelty. Second, it was in the figure of the Tau an object of idolatry, and in the Roman Church it is adored. Third, it is an article of merchandise disposed of by the priest, and in the sale of indulgences it forms an important item of public revenue. So that in its use as a standard of war, the author adds, nations have the choice of three objects, of which it is the symbol—cruelty, idolatry, avarice. We suspect that few, even of the readers of Mr. Macintyre's book, will, from his many historical illustrations and zealous arguments, be led to object to the use from the abuse of the sacred symbols. At all events, few will associate motives and influences of cruelty, idolatry, and avarice with the noble flag of England, if even they remember that the rectangular and diagonal lines of red, blue, and white represent the combination of forms of the cross as used by the countries now forming the United Kingdom. It is

really curious to read what Mr. Macintyre can say on this subject.

The Chronicles of Merry England Rehearsed unto her People. Books I.—VI. By the Author of 'Mary Powell.' Hall, Virtue, and Co.

THESE English Chronicles are pleasant to read, whatever may be thought of their value as historical records. The author professes to do no more than rehearse in readable narrative the story of the early history of our country, as described by its oldest chroniclers, without attempting to distinguish between fable and fact, between myths and history. The reader is quietly recommended "neither rashly to believe all, nor sceptically to doubt everything." Sufficient authority for the matter of the book is claimed in the fact of Spenser and Shakspeare having adopted popular legends as the groundwork of their immortal verse, and the same materials may serve for a historical romance. A book like this calls for no critical notice, and we have merely to say that it is written in the attractive style which has rendered some of the previous works of the author of 'Mary Powell' so popular.

On the Atmospheric Changes which Produce Rain and Wind, and the Fluctuations of the Barometer. Second Edition, with Additional Essays. By Thomas Hopkins. J. Weale.

SINCE the first edition of this work was published meteorological knowledge has received many important accessions, and improved methods of observation have been more widely introduced. The influence of the Meteorological Society, and of the British Association for the Advancement of Science, have largely brought about this result, but the diffusion of works like that of Mr. Hopkins has also contributed usefully to the extension of Meteorological inquiry. The essays in this volume contain much valuable information, the result of careful personal observation, and of the study of the works of travellers, navigators, and others enjoying peculiar facilities for collecting facts. Whatever may be thought of some of the theoretical speculations of the author, his work will be prized for the large amount of miscellaneous and striking information it contains, relative to the causes of wind and rain, and other atmospheric phenomena. The book is illustrated with plans and diagrams.

Iringism and Mormonism Tested by Scripture.

By the Rev. Emilius Guers; with Prefatory Notice by James Bridges, Esq. Nisbet and Co. Of two of the most remarkable forms of religious delusion in recent times, this little work gives a concise historical and descriptive account. The peculiarities of Iringism and of Mormonism are accurately and candidly stated by M. Guers. The translator, Mr. Bridges, who was a personal friend of Mr. Irving, adds some biographical notes about that wonderful man, "of an ardent character and lively imagination, yet deficient in solid judgment," as M. Guers in his opening paragraph describes him. Those who wish to see the most favourable account of him in his intellectual and rhetorical power, apart from the peculiarities of his later theological views, will find in Carlyle's Miscellaneous Essays the admiring estimate of one capable of understanding and of appreciating Edward Irving. The pictures of Iringism as now held, and of Mormonism, display very melancholy phases of religious opinion.

The Newcomb. Edited by Arthur Pendennis, Esq. Bradbury and Evans.

MR. THACKERAY'S work continues in the same pungent style of which we gave examples in noticing the opening Number, and that it may be brought to the memory of such of our readers who are not periodically enjoying it, we quote the following from a capital sketch of society at Baden:—"Besides roulette and trente et quarante, a number of amusing games are played at Baden, which are not performed, so to speak, *sur table*. These little diversions and *jeux de société* can go on anywhere; in an alley in the park; in a picnic to this old schloss, or that pretty hunting lodge; at a tea-table in a lodging house or hotel; in a ball at the Redoute; in the play rooms, behind the backs

of the gamblers whose eyes are only cast upon rakes and rouleaux, and red and black; or on the broad walk in front of the Conversation Rooms, where thousands of people are drinking and chattering, lounging and smoking, whilst the Austrian brass band, in the little music pavilion, plays the most delightful mazurkas and waltzes. Here the widow plays her black suit, and sets her bright eyes against the rich bachelor, elderly or young as may be. Here the artful practitioner, who has dealt in a thousand such games, engages the young simpleton with more money than wit; and knowing his weakness and her skill, we may safely take the odds, and back rouge et couleur to win. Here mamma, not having money perhaps, but metal more attractive, stakes her virgin daughter against Count Fettacker's forests and meadows; or Lord Lackland plays his coronet, of which the jewels have long since been in pawn, against Miss Bags' three per cents. And so two or three funny little games were going on at Baden amongst our immediate acquaintance; besides that vulgar sport round the green-table, at which the mob, with whom we have little to do, was elbowing each other."

Waverley; or, 'Tis Sixty Years since. By Sir Walter Scott. A. and C. Black.

WAVERLEY for eighteenpence! Of good type and respectable appearance too, more so than the majority of the cheap publications of the day. This issue of the novels of Sir Walter Scott, of which the first volume is before us, is an event in the history of cheap literature. The new proprietors of the copyright of Sir Walter Scott's works have already produced editions suited to various classes of readers, but the present issue crowns the services rendered in this matter to popular literature.

SUMMARY.

OF French works recently published, containing matter throwing light on important historical events, we may call attention to a history of Charles V., by Amédée Pichot, entitled *Charles Quint, Chronique de sa Vie Intérieure et de sa Vie Politique, de son Abdication, et de sa Retraite dans le Cloître de Yuste* (Furne et Co., Paris; Dulau and Co., London). The author has employed diligent research in elucidating his subject. On the Cloister Life of the ex-Emperor, those who have read the work of Mr. Stirling will be interested in the perusal of another account by a Catholic and a foreigner. M. Pichot pays Mr. Stirling the compliment of terming him "un auteur Ecossais d'un rare esprit;" but he adds, that from the use of the same historical materials, he has arrived at very opposite conclusions, and has reproduced "deux ou trois des fausses assertions que j'ai réfutées victorieusement." M. Pichot affirms, that while others have recorded the events of the reign of Charles V., he is the first who has described his true personal character. The seventh volume of the *Mémoires et Correspondance Politique et Militaire du Roi Joseph*, edited by M. A. Du Casse (Perrotin, Paris; Dulau, London), contains the sequel of the Spanish Correspondence down to the end of April, 1811. We do not find much in this portion of the work to modify our view of the history of the time, but interesting light is thrown on the character of those who took a leading part in political affairs.

In the 'Traveller's Library' (Longman and Co.), two parts, 61 and 62, contain *Selections from the Writings of the Rev. Sydney Smith*. The pieces are, in part first, four Essays on Education, on the Ballot, and the letter on American Debt. In the second part, Lectures on Wit and Humour, on the Conduct of the Understanding, and on Taste, delivered originally at the Royal Institution.

A book entitled *Vestiges of Divine Vengeance; or, the Dead Sea and the Cities of the Plain* (Wertheim and Macintosh), by William Elfe Taylor, is a compilation of a kind not much to be approved. Popular statements and expositions of the researches of learned men are often useful, but there is sometimes an unseemly haste shown in seizing

on some work of value, and dressing up in a cheap form portions of its contents. This was partly done by Mr. Taylor with the Chevalier Bunsen's work on Hippolytus, and now the work of M. de Sauley seems to be pounced upon, and his 'important discoveries' on the Red Sea are presented in condensed narrative. It remains to be proved whether M. de Sauley's observations are correct or not. A succeeding traveller has denied entirely their accuracy, and the question has to be decided by future explorers. Mr. Taylor is rather hasty, therefore, in his trumpeting of M. de Sauley's discoveries. Let us do the author the justice of adding, that his little volume contains selections of extracts from the works of other travellers who have described these regions.

A new edition, the third, of *Poor Paddy's Cabin; or, Slavery in Ireland*, by an Irishman (Wertheim and Macintosh), contains striking representations of Irish life and character in the present day.

Several maps of the seat of war, and of the countries most frequently referred to in political journals at this time, are published, some of them very cheap (Collins), and others of a more elaborate and expensive kind.

A new edition is published of a piece of religious biography, entitled *Peace in believing: a Memoir of Isabella Campbell*, by her Minister (Hall, Virtue, and Co.). The subject of the memoir was a young pious Scotchwoman in humble life.

A new edition also appears of *The Autobiography of a Working Man*, by Alexander Somerville (Hardwicke). Reprinted from 'Household Words' and 'Chambers's Edinburgh Journal,' is a series of sketches of Oriental life and manners, *Pictures from the East*, by John Capper (Chapman and Hall). Reprinted from the 'Leader' newspaper is a series of *Political Portraits*, by Edward Whitty (Trübner and Co.), containing sketches of most of the conspicuous public men of the day, commencing with Prince Albert, and including Lords Aberdeen, Clarendon, Hardinge, Derby, Shaftesbury, John Russell, Palmerston, and others of different parties in the State.

LIST OF NEW BOOKS.

Bardwell's (W.) Healthy Homes, boards, 2s.; cloth, 2s. 6d.
Bell's English Poets, Vol. 6: Cowper, Vol. 2, 12mo, 2s. 6d.
Bohn's Antiquarian Library: Ordreux Vitals, Vol. 5, 5s.
— Classical Library: Elegies of Propertius, post 8vo, 5s.
— Illustrated Library: India, post 8vo, cloth, 5s.
— Philosophical Library: Logic, post 8vo, cloth, 5s.
— Standard Library: Cowper's Works, Vol. 4, 3s. 6d.
— British Classics: Defoe's Works, Vol. 1, p. 8vo, 3s. 6d.
Bradley's (Rev. A.) Sermons chiefly on Character, cloth, 5s.
Casar for Beginners, by J. Currie, 18mo, cloth, 1s. 6d.
Caswall's (H.) Western World Revisited, fcap, 8vo, cloth, 6s.
Christmas's (Rev. H.) Sultan of Turkey, &c., 1 vol., 2s. 6d.
Churton's Book of Psalms in English Verse, fcap, 7s. 6d.
Coghlan's New Guide to Paris, 16th ed. 2s. 6d.; with views, 5s.
— Miniature Guide to the Rhine, 12mo, cloth, 3s.
Cumming's (Rev. Dr.) Leviticus, 12mo, cloth, 5s.
D'Arbly's Diary, Vol. 5, new edition, 12mo, cloth, 3s.
Eclipse of Faith, 5th edition, post 8vo, cloth, 6s.
Edward Willoughby, 2 vols. post 8vo, cloth, 4l. 1s.
First Seal: Short Homilies on St. Matthew, fcap, 8vo, 8s.
Giles's (Dr.) Christian Records, 8vo, cloth, 9s.
Gray (H.) on the Spleen, 8vo, cloth, 15s.
Guyer's (Rev. E.) Iringism and Mormonism, crown 8vo, 2s.
Haxthausen's (B. V.) Transcaucasia, 8vo, cloth, 18s.
Hood's Sketches of Female Scripture Characters, 3s. 6d.
Jones's (Rev. S. F.) Throne of Grace, fcap, cloth, 2s. 6d.
Lady Una and Her Queendom, 12mo, cloth, 7s.
Lamarine's Memoirs of Celebrated Characters, 2 vols. 4l. 8s.
McBurney's Extracts from Swift's Metamorphoses, 1s. 6d.
McWalter's (J. G.) Tales of Ireland, fcap, 8vo, cloth, 3s. 6d.
Macintosh's (Sir J.) Works, 3 vols., fcap, cloth, 4l. 1s.
Malone's (R. E.) Australian Colonies, post 8vo, cloth, 7s. 6d.
Memorials of the Trosachs, square cloth, 1s. 6d.
Montgomery's Christian Poetry for Schools, 12mo, 2s. 6d.
Morrison's (Dr.) Lectures to Young Men, 12mo, cloth, 2s. 6d.
Murchison's Siluria, 8vo, cloth, 4l. 10s.
National Debt and How to Pay It, 8vo, cloth, 5s.
Newall's (E.) Old Minor Canon, fcap, 8vo, cloth, 3s. 6d.
Opie (Amelia) Life of, by Cecilia L. Brightwell, 8vo, 10s. 6d.
Origines Kalendarie Italice, by E. Gresswell, 4 vols., 42s.
Pinnock's Analysis of History of Reformation, new ed. 4s. 6d.
Pretyman's (J. R.) Church of England & Erastianism, 7s. 6d.
Robson's (W.) Life of Cardinal Richelieu, post 8vo, 3s. 6d.
Russell's Light which Lighteth Every Man, 12mo, cloth, 6s.
Sermon on the Mount, 64mo, bound, clasp, 1s. 6d.
Simon's (E.) Sanitary Report, 8vo, cloth, 8s. 6d.
Slater's (R.) Table Showing Value of Gold, 8vo, cloth, 1s. 6d.
Smith's (Sidney) Works, new edition, 3 vols., fcap, 4l. 1s.
— (A.) Theory of Moral Sentiment, 8vo, cloth, 5s.
Smytman's (Rev. G. H.) Florum Sacra, square 16mo, 2s. 6d.
Sparling's Gatherings from Many Authors, 12mo, cloth, 3s.
Stephan's Spirit of the Church of Rome, 12mo, cloth, 3s. 6d.
Strickland's Queens of England, post 8vo, cloth, 7s. 6d.

Traveller's Library, Parts 61 & 62: Sidney Smith, 2s. 6d.
Trench's (R. C.) New Testament Synonyms, fcap. 8vo, 5s.
Vara; the Child of Adoption, fcap. 8vo, cloth, 2s. 6d.
Von Moltke's (Baron) Russian Campaigns in Turkey, 14s.
Walter's Help to Profitable Reading the Psalms, fcap. 4s.
Weibrecht's (Rev. H.) Memoir, crown 8vo, cloth, 7s. 6d.

THE ROYAL GARDENS, KEW.

THE Parliamentary Estimate for the amount required for maintaining and keeping in repair the Royal Parks and Pleasure Grounds, printed by order of the House of Commons, is accompanied this year by a Report on the above scientific establishment, and delightful place of summer resort, to which it may be well at this season to draw some attention. There are few national institutions of such promising economic usefulness, so interesting in all their details, or so attractive as a means of healthful and intelligent recreation, as the Royal Gardens and Pleasure Grounds of Kew. Situated in a lovely suburban locality, remarkable for the richness of its soil, and accessible at all times of the day by road, by river, and by rail, botanists occasionally take up their abode in their vicinity for weeks together for the purposes of study; and the people flock to them daily, including Sundays, in numbers unexampled in any other country of Europe. During the last thirteen years the number of visitors to the Royal Gardens has increased gradually, year by year, from 9000 to 331,000, the number last year exceeding even that of the Great Exhibition year; and although we have to thank the Government, and the Director, for some important new works and improvements, the increasing interest taken in these delightful Gardens by so numerous and well-behaved a public, calls for an increasing share of interest and patronage from Her Majesty's Commissioners. It is true that a Crystal Palm House has been lately erected in Kew Gardens of size and lightness unsurpassed by any permanent structure of a similar kind in the world, except the Palace at Sydenham, and a neat and commodious glass-house has been erected for the cultivation of the Great Victoria Water Lily; but the general plant houses throughout the Gardens are unworthy of the establishment under its present advanced condition, and the sum voted annually by Parliament for its maintenance is little more than half the amount allowed to the metropolitan parks. It is obvious that the requirements of a scientific vivarium, herbarium, and museum, are far greater than those of a mere pleasure-park, and we refer to the following Report to show how utterly insufficient is 11,000*l.* a-year for an institution of such increasing magnitude and importance as our national Botanic Gardens.

"Royal Gardens, Kew, 5th April, 1854.

"As my Report on the Royal Gardens and Grounds of Kew is especially intended to show the benefits that have accrued therefrom to the public generally, I cannot do better than, in the first instance, to state the increase in the number of visitors since they were thrown open unrestrictedly (or only with certain needful regulations) to all desirous to profit by them, either for recreation or instruction, as exhibited by the following table:—

Year.	Visitors.
1841	9,174
1842	11,400
1843	13,492
1844	16,114
1845	28,139
1846	46,573
1847	64,282
1848	91,708
1849	137,865
1850	179,627
1851	327,900
1852	231,210
1853	331,210

"The progressive increase in former years has, in my previous Reports, been shown to arise in part from the greater facilities of access and extended hours (now, too, including every day throughout the year), granted by the Board; and in no small degree from the more fully developed

beauty of the Grounds, the greater extent of the collections of the growing plants, and the treasures contained in the very instructive Museum of Economic Botany.

"During the past year, however, the principal additional feature in the Garden is derived from the formation of a Fountain in the Ornamental Water, and this is accompanied by a most abundant supply of good water throughout almost every portion of the Ground, distributed to the best possible advantage. The general arrangement of the Gardens and Arboretum having been recently completed, we have little to report on any changes, such as took place in former years.

"The new 'Victoria' House, for the cultivation of that most magnificent of aquatics, though begun the preceding year, was only finished during the present, and promises to be a great object of attraction to visitors. With this exception, we have had no additional accommodation for the almost daily accessions of new plants, or to suit the larger growth of the older ones; and we stand very greatly in need of more Greenhouses (for plants of temperate climates), and those upon a large scale, for our tall trees, Conifers especially, which suffer much for want of space.

"I can only refer to my former Reports for an enumeration of many of the more remarkable of the living plants possessed by these Gardens. The past year has been, in regard to such, no less productive than former years, and we have received greater assistance than ever in our correspondence and communications abroad from all the Government Public Offices, and from the various Steam-boat Companies, &c. But it behoves me especially to mention the valuable services rendered by the Chief Secretary of State for Foreign Affairs. The Earl of Clarendon has, with no small trouble, introduced not only living plants of the 'Argan' tree of Southern Morocco (celebrated for yielding fodder for cattle in the husks of the fruit, oil similar to olive-oil in the nuts, and a beautiful wood in its trunk), but he has imported the seeds also in the finest state for germination, and in such quantities, that they have, partly by his Lordship and partly by ourselves, been distributed to all such of our colonies as are suited to the growth and perfection of the tree, and to various other countries.

"The Medical Department of the Garden is now completed, and proves very serviceable to students of medicine and others.

"But the Department of the Garden which becomes annually of greater importance, and which has proved more attractive and more practically useful than our warmest wishes could have anticipated, is doubtless the Museum, destined to exhibit in a classified manner the various products that are in any way beneficial to mankind, derived from plants of which we see specimens cultivated in the Garden, or in the Hothouses and Greenhouses. In less than seven years from its foundation, a collection is formed, at almost no expense to the country, mainly from donations, such as no other country possesses, and such we may truly say as no other country has attempted to form, notwithstanding its manifest advantages to a great commercial nation. It is indeed of much greater extent than our present building can contain; so that a vast number of objects are for the present obliged to be put aside, in sheds and other places, without its being in our power to exhibit them to the public. One entire room, for example, is devoted to the products of Grasses. The various fibres and raw textile materials, especially such as contribute to the manufacture of paper, and the numerous samples of vegetable oils, waxes, and tallow, all now so eagerly sought after by the mercantile world, would, if suitably arranged, fill another apartment. Some idea may be formed of the nature of this collection by a reference to the popular Guide Book of the Garden, where there is also a plan of the rooms which illustrates the arrangement.

"In a more strictly scientific point of view, the value of this establishment has been enhanced in an eminent degree by donations from those who have witnessed its importance to the country.

Kew had hitherto possessed no Herbarium or Hortus Siccus, the invariable accompaniment of every Botanic Garden abroad, and no Library, save the small practical one for the use of the Gardeners; but by gifts it is now endowed with both the one and the other, of such extent that they may be considered second to few in the kingdom. The acknowledged importance of these Gardens induced the surviving sister of the late Dr. Bromfield, of East Mount, Isle of Wight, to present the whole of that gentleman's Herbarium and Botanical Books to the Royal Gardens; and, shortly after, our distinguished botanist, Mr. Bentham, presented his most extensive Herbarium and valuable Library, the fruits of nearly forty years' labour and research, only requiring that they should be made available to public scientific use. The difficulty at first felt of immediately accommodating such collections was happily soon obviated, by Her Majesty's gracious permission for us to have the use of the residence of the late King of Hanover at Kew; until a suitable Museum, and one worthy of the Garden and the nation, can be erected. It is not easy to estimate the pecuniary value of the two donations; but I am sure I express myself within bounds when I say that they could not have been provided, if the expense had fallen upon the establishment, at a cost less than 10,000*l.*; and yet that does not convey a notion of their scientific value, for the Herbaria are those of botanists eminent for their writings, and necessarily contain the identical specimens (though in one sense but a small portion of the entire collections) described in their several publications.

"The Herbaria and Books now mentioned, together with those which are the private property of the Director, afford such opportunities and advantages for reference and study as no capital in the world can boast; and arrangements are in progress for rendering them accessible to the scientific botanist. Already no less than four botanists, unconnected in any way with the Botanic Gardens, have made Kew their residence for some time to come, with the sole object of consulting these collections.

"Still more to increase the usefulness of this establishment, the First Commissioner has it in contemplation to have a course of Botanical Lectures delivered in the summer months, mainly indeed for the scientific improvement of the Gardeners, but of such a nature that the Public may also avail themselves of this opportunity for instruction in botanical knowledge.

"I will only further mention, that for the last twelve months the Director has resided at the Garden, in the house graciously given by Her Majesty for that purpose; thus enabling him always to be on the spot, and to bestow more continual attention than was compatible with his former residence at some distance from Kew.—I have, &c.

"(Signed) W. J. HOOKER, Director.
"To the First Commissioner of
Her Majesty's Works, &c."

The latest structural additions to the Gardens have been a Fountain in the Ornamental Water and the Victoria House. No additions have been made to the hot-houses, which are not only inadequate for botanical purposes in point of space, but are inconvenient in arrangement and dilapidated. So much has the science of botanical horticulture advanced during the last few years among the wealthy classes, that the houses at Kew have become utterly antiquated and shabby compared with the conservatories of private individuals, and it is high time that these crumbling old glass sheds should be pulled down and replaced by buildings of a larger and more elegant modern calibre.

Two very important new features have, however, been lately developed in the Kew Gardens, which should claim even prior attention,—a Museum of Economic Botany, and a Herbarium of Dried Plants. We suggested some time since that the first of these should be removed to the Botanical Department of the British Museum; but since the British Museum wants room, and a Herbarium of great scientific value has been presented to the Kew establishment, a very general opinion is entertained that the Botanical Department in Bloomsbury

should be transferred to Kew, and be made available to the public, in a building commodious enough for free arrangement and reference. The Museum of Economic Botany, the Library of Botanical Books, and the Herbarium, should all be under one roof, and the erection of a suitable building for their reception in Kew Gardens would be of great convenience to botanists, and give a healthy encouragement to this most accessible and delightful of all the natural sciences.

ROYAL ACADEMY.

AMONGST the younger school of figure painters, Mr. W. C. T. Dobson has distinguished himself this year by a production of great care and truthfulness, *The Charity of Dorcas* (520). The painting of this subject is firm and good, and there has been no disposition to sacrifice the verities of nature to the seductions of superficial beauty—a trait which at once reminds the spectator of the Pre-Raphaelite mode of treatment, with which, however, the artist seems to have nothing else in common. Thus the drawing of the legs of the child in the front of the group is correct, though decidedly ugly. With this picture, it must be acknowledged that Mr. Le Jeune's composition of a similar class, *Christ Blessing Little Children* (541), contrasts unfavourably. Where the grouping is carefully prepared, the attitudes artificial, the faces studiously contrasted, and the painting so thin and subdued, we long for a little more art to disguise the artifices, and more nature to give freedom and vigour to the action. The calm serenity of the style expresses, nevertheless, one phase of the sentiment inspired by the scene, and to that extent the picture is successful and effective. Mr. Le Jeune's other subject, *The Plough* (287), is in a style well known, and in its domestic sweetness and simplicity unrivalled. Mr. Egg's picture, *Dane Ursula and Margaret* (461), though powerful as ever, we think, fails in rendering the sentiment of the scene from Nigel. The lady, to say the truth, is not so pretty as she ought to be for Margaret; and the elder figure displays only one side of that compound of buxom gaiety and true sympathy, combined with wily knowledge of human nature and lax honesty, which has been so ably drawn by Scott. Never was the great novelist's graphic power more skillful than in this scene, and it requires a fuller embodiment than is here presented. A remarkable piece of profuse and vivid colour occurs in a picture by Maguire, called *The Entanglement* (443), which in this respect deserves attention, though the figures are dwarfed, and their features somewhat insipid. There is some good painting of mere material in this subject, though expression is wanting in the main points. Mr. Faed's *Peggy* (481) is one of those attractive pieces, the artifice of which is seen immediately, consisting of a sparkle of alternate lights and shades, which gives brilliancy to scenes already gay and vernal. The sprightliness of the figure cannot be denied, and the artist conveys to the spectator something of that delight in natural beauties which he must himself feel. *Morning Reapers going out* (448) is equally remarkable for a striking arrangement of light and shade, which need, however, closer keeping to the actual facts of nature before it can win a lasting admiration. A subject by J. C. Horsley, called *Attraction* (481), representing a servant girl, smartly dressed, but drawn aside from her occupation, which is sufficiently indicated by the implements in her left hand, by the passage of some guardsmen, at whom she is peeping from behind a curtain, is a piquant subject, fairly and boldly treated, and leaving an impression of great spirit and taste in dealing with an idea of difficult management. *Guidrines and Arrivagus* (492), by W. Gale, is in a style which we should be little led to expect from the artist's previous works. A sacrifice to fashion is attempted in the approach made to the Pre-Raphaelite school, but along with a Gothic arrangement of figures, an absence of distance, and preponderance of green foliage, there is evidence of care and study in the painting of the various textures, and exaggerated enormities of outline are not forced upon the

eye. Mr. Frank Wyburd exhibits a striking and delicate female head in *Nourmahad* (504). Among the lady artists of this class, Mrs. Ward takes a prominent place in her *Scene from the Chobham Camp* (582), where the colouring recalls irresistibly, in parts, the style of her husband; but the idea was well chosen, and the subject worthy perpetuating in such a manner. A female figure, with a Scotch motto (592), by Margaret Robinson, is a gay and bright piece of colour.

Mr. Ansell's *Traveller Attacked by Wolves* (536) and Mr. Glass's *Richard on his Way to Jerusalem* (414), though both pictures of eminent and conspicuous merit, are scarcely so for the artists, who do little more than repeat themselves, without displaying any fire-new products from the mint of thought.

In the department of portrait we have to observe that, though the numbers happily diminish, the quality does not much improve, and the general run of subjects is decidedly unprepossessing. After being amused with the freaks of vanity, or disgusted with the arts of notoriety-hunters, we look round, almost in vain, for some specimens of genuine worth or beauty, to dignify or adorn the otherwise barren scene. Of all the painters of this class the general leaning appears to be in favour of Mr. Grant. There is something commandingly independent and manly in his *Lieut. Colonel Grant* (138), and there is nothing to wish for in the head of *Mr. Macaulay* (69). Even the complimentary addition to the height of *Lord John Russell* (193) is a concession which nobody grudges, whilst the keen and inspired, but somewhat worn look of the statesman is distinctly rendered. *The Viscount Gough* (74) is painted in accordance with military precedents, a good old stock attitude of command, which does justice to the hero, and we hope will afford satisfaction to the gallant Bengal Artillery, for whom it has been painted. One of the most vivid pieces of portraiture in the rooms, though the flesh tints are not all true to nature, is the head of *The Rev. George Loch* (345), painted by Knight. *Sir Stafford Northcote* (174) is another good likeness, but not without affectation. Of *My Two Boys* (33) we can only say it is to be regretted some friendly hand did not stay the suicidal purpose of dispatching such a subject, treated in such a manner, to the walls of a public exhibition, where it stands a record of bad taste, such as every spectator will gladly be able to forget having ever beheld. The only attempt at originality, or, indeed, of style, in portrait-painting, is to be met with in Mr. Boxall, who reproduces traditions of Reynolds and Lawrence, unhappily not always with the best success. A *Portrait* (205) affects the free handling of the former master, whose splashes, however, had all a well-ascertained meaning. The eye is here attracted with the same assumption of accomplished style, but a close inspection does not bear out first impressions. The lady's scarf in this subject is of a colour and material which it is quite impossible to identify with any known specimen of millinery, and in 338, though the same manner is attempted, and the portrait is in remarkably quiet and natural taste, there is a want of firmness and substance which shows a screw loose somewhere in the construction. *Viscount Donne* (211) and *L. Cubitt, Esq.* (296), are more in keeping with the ordinary conventional modes of the day, and are less remarkable. A new form of complimentary phrase is to be remarked in the treatment of Mr. Swinton, who gives *Lady Ribblesdale* (77) the *tournaire* of the Persian sibyl, and of M. Schyfer, who gives *Lord Dufferin* (206) the pose of Donatello's St. George. Mr. Herrick's *Duchess of Argyll and Marquis of Lorn* (133) obtains immediate notice, not only from the subject, but from its very elegant treatment. The only fault is a tendency to over-refinement, and consequent feebleness. Of Mr. Desanges' three portraits, the most ambitious is certainly that of *Lady Greenock* (263). The lady is represented on a balcony, lighted up by roseate hues, issuing from heaven knows where, the hour of the day or night being a point of the utmost uncertainty. The other two, *The Viscountess Folkestone* (380) and *Mrs. John Dundas* (382), are in a similar style of

flashy effects and artificial brilliancies, which prove that distinguished patronage does not always lead to the cultivation of the best taste. The *Portrait of a Lady* (253), by W. Gush, though rather insipid in arrangement and treatment, is yet a striking and brilliant performance, and presents an exceptional case of beauty in the original. Mr. Harwood's *Mrs. Maberley* (363), though a little overloaded with lace and flounces, is a clever and promising production. We should recommend, however, a rather higher tone of colour, which has a tendency here to be flat and weak. *Mrs. Bontine* (282), by T. Heaphy, is a pleasing face; and a small cabinet portrait of *Lady Sarah Spencer* (123), by T. Hollins, in the east room, not a little resembling the style of the old Flemish school, is remarkable for handling and finish.

TOPICS OF THE WEEK.

THE Council of the British Association have avoided the inconvenience of fixing the forthcoming meeting at a time when most of the members are taking their continental tour, by making it later than usual. Instead of the first week of September, the last week of that month is decided on, and those who wish to enjoy a holiday trip elsewhere should take it beforehand. The magnificent building, St. George's Hall, Liverpool, will be placed at the service of the Association, and every effort is being made to receive the *savants* of all nations with *clat*. We trust that all who are members and friends to the British Association will make it their business as well as pleasure this year to attend the meeting. Another year of such indifference as was shown by the leading members at Hull, with similar mediocrity in the quality of the papers, may prove fatal to the Society.

Letters were received a few days since in Leipsic by the family of Dr. Vogel, the African traveller, announcing his arrival at Lake Tsad, and by the last Mediterranean mail despatches have been received in London, describing his progress to the end of February. He arrived at the borders of Soudan about Christmas, and on reaching Kuka had been kindly received by the Sultan Abd-el-Rahman. From astronomical observations made in Kuka, Dr. Vogel had ascertained its geographical position, &c., to be as follows:—

North Latitude.....	12° 55' 14"
East Longitude.....	13° 22' 0"
Magnetic Variation.....	14° 3' 2" W.
Magnetic Inclination.....	13° 6' 8"

Elevation above the level of the sea, 900 feet. This position differs nearly one hundred miles from that previously obtained. The slight elevation of Lake Tsad, only 850 feet above the level of the sea, is another feature of interest, as such a height allows no fall for any of its rivers, if connected, according to some writers, with the Nile or the Kowara. Dr. Vogel and his companions were in the best health and spirits, and on the point of making a survey of Lake Tsad in the *Lord Palmerston*, the boat in which Dr. Overweg first navigated those waters. The letters from Dr. Barth by the same mail are more than a twelve-month older than these from Dr. Vogel, and of a date anterior to those last received. They are written from Wurno, near Sokoto, previous to his departure for Timbuctoo, and bring, therefore, no new intelligence of his proceedings. He had been most kindly received by the Emir el Mumenin, the great ruler of the Fellata empire, who not only hospitably entertained him, but promised him an escort on his journey to Timbuctoo, and had freely given him permission to explore the extensive Fellata dominions, including Adamana. The present residence of the Emperor of the Fellatas is not Sokoto, but Wurno, a comparatively new town, situated about fifteen geographical miles north-east from Sokoto. Here Dr. Barth stayed upwards of a month, explored the country round as far as Sokoto, and collected much valuable information, particularly respecting the region between Sokoto and Timbuctoo, which has hitherto formed an entire blank in our maps. This region, as is already known to our readers, the intrepid traveller after-

wards succeeded in exploring himself. From his letters it is inferred that he left Sokoto about the 10th of May, 1853, and as he entered Timbuctoo on the 7th of September, it follows that the journey took him just about four months.

The *Journal des Débats* of Paris recommends that a regular scientific and archaeological commission shall be sent out to Turkey, to explore the different provinces of that country which are, or are likely to become, the scene of hostilities. At first glance, the bustle, din, and sanguinary confusion of war may seem to render such an undertaking at the present moment singularly unpromising; but in reality the time is favourable, as the presence of armies produces facilities which would otherwise not exist, and calls attention to spots which would otherwise not be thought of. This is proved by the fact, that when Bonaparte was sent into Egypt, he was accompanied by a body of *savans*, who made most interesting researches amidst the clash of arms; and scientific commissions which accompanied the armies in the war for the independence of Greece made useful discoveries also; in Algeria, too, France has always had *savans* profitably at work, in the rear or by the side of her military forces. It is to be hoped, therefore, that the suggestion of the *Débats* will be acted on; and we should be glad to see our own countrymen act on it, for their own part, either separately or in conjunction with the French. Greeks, Romans, the Greeks of the Lower Empire, the Crusaders, and the Turks, have all played a part in the provinces now called Turkey, and all have left remains of their creative or destructive powers which it would be most interesting to explore.

This week's obituary reports the death, at the age of eighty-eight, of Sir Robert Heron, Bart., of Stubton Park, Lincolnshire, long conspicuous in political circles as one of the Whigs of the Fox school, and among scientific men favourably known as an amateur naturalist, being a Fellow of the Linnean, Horticultural, and Zoological Societies, in the proceedings of the last of which he took an active interest. The collection of living animals and birds at Stubton was one of the richest in the country. About three years since, Sir Robert Heron published reminiscences of his life, under the title of 'Notes,' which were reviewed by us at the time ('L. G.,' 1851, p. 915), a book of sufficient importance to incur the denunciations of the 'Quarterly Review.' Whatever points in that work are open to criticism or censure, it contains matter of much interest and value. The author's reminiscences reach back to the time of the First French Revolution. He heard Louis XVI. addressing the States-General in 1789, and, after an interval of sixty years, three Revolutions having intervened, with all the manifold events of French history, he was present at a meeting of the National Assembly of the Republic of 1848. The notices and anecdotes of Fox, Canning, Burdett, Whitbread, Sheridan, and other notables of his time, form the most attractive features of the memoir. There are few of the contemporaries and friends of Charles James Fox now surviving. At the last Drawing-room, the appearance of Sir Robert Adair reminded many of events even more remote than those in which Sir Robert Heron took part, his public life not having commenced till 1812, when he first entered Parliament.

Captain Baron Maurice, a distinguished officer of engineers of Switzerland, and a still more distinguished writer on military matters, died a few days ago. He was the author of a work entitled 'Defense Nationale de l'Angleterre,' published in 1851, in which he pointed out the insufficient defences of our coasts against attack. The book was much read in England at the time, and was a good deal quoted in Parliament and newspapers in the discussion of the defence question. The death of another Swiss writer, M. de Haller, of Berne, has also to be recorded. His works were chiefly of a political character; and the one which excited most attention was entitled 'Restauration de la Science Politique.'

M. Marnel, a Frenchman established in Belgium, who wrote a remarkable 'Life of Well-

ton' some few years ago—remarkable for being the first and only work from a French pen which did justice to the great soldier and great citizen—departed this life a few days back. He was in the early prime of manhood; and had for some time been engaged on a 'History of Napoleon,' and other works of importance.

Judgment has been delivered in the appeal case lately argued in the House of Lords as to the right of the Town Council of Edinburgh to make statutes for the University, as its Patrons, which the *Senatus Academicus*, or Professors in their collective capacity, had disputed. The question was decided by the Scotch Courts of Law in favour of the Town Council, and the judgment has been affirmed in the House of Lords, with costs.

Mr. Adam White, F.L.S., assistant at the British Museum, is preparing to publish by subscription an illustrated memorial of the poet of Rydal Mount, to be called 'Wordsworth's Wild-flowers.' The work will extend to about sixty pages of letter press, and will be illustrated with four coloured engravings of groups of the flowers mentioned in Wordsworth's poems, an engraving of Rydal Mount, and a fac-simile of the poet's autograph. The price will be 7s. 6d.

A subscription has been commenced for a monument to the memory of Professor Wilson of Edinburgh. The honour of a public funeral, at which the magistrates of the city, the Professors of the University, and other public bodies attended, has already attested the high sense entertained of the late Professor's genius and his services to literature. In private life being as much beloved as he was respected in his public character, it is not surprising that his friends have projected some more permanent memorial. Edinburgh is renowned for statues and monuments of its illustrious men, few towns being richer in such public memorials. With the names of Burns, Scott, Dugald Stewart, Playfair, and Jeffrey, that of John Wilson is not unworthy of being thus associated. The subscription list contains some of the names most distinguished in literature or in public service in the northern part of the island, but many who have elsewhere been delighted by his works or instructed by his lectures may be glad of the opportunity of joining in this monumental tribute. The amount of money already collected is upwards of 477l.

In consequence of the resignation of Professor Edward Forbes from the President's Chair of the Geological Society, arising from his appointment to the Regius Professorship of Natural History of Edinburgh, the geologists have elected W. J. Hamilton, Esq., to fill the office of President. Mr. Hamilton has for some years past performed the duties of Honorary Secretary to the Society and is greatly esteemed among his brethren of the hammer.

The Assyrian Excavation Society seems likely to obtain important aid in the provinces as well as in London. On Saturday last a meeting was held in Manchester, with the President of the Manchester Chamber of Commerce in the chair, for the purpose of promoting the excavations at Nineveh, under the direction of Mr. Loftus and Mr. Bouchier, when a considerable addition was made to the Fund.

M. Longperier has been elected a Member of the Academy of Inscriptions et Belles Lettres at Paris, in the room of M. Choiseul d'Aillecourt, deceased.

We are sorry to learn the death of M. Rochet d'Heriourt, French Consul at Djeddah, noted for his travels in Abyssinia and other parts of Africa.

At a recent meeting of the Colchester Town Council, the town-clerk stated that Mr. Charles Gray Round had placed the chapel of the castle at the disposal of the town for the purpose of the long-contemplated museum. This would be a sufficient compliance with the terms of the late Mr. Vint's will.

The diaries and correspondence of the late Mrs. Opie are announced for publication, under the title of 'Memorials of Amelia Opie.' The editress is Miss Cecilia Lucy Brightwell.

Mr. J. Weyland, of Woodrising Hall, Norfolk, an amiable country gentleman, and author of

several valuable pamphlets on rural economy, died a few days since.

At the Royal Italian Opera the event of the week has been the re-appearance of Madame Grisi, in the first of her series of farewell performances. *Norma* was the opera on Thursday evening, and, independently of the special interest of the occasion, the performance was of rare excellence, a stronger cast never having been associated in its representation. Madame Grisi as *Norma*, Mlle. Marai as *Adalgisa*, Tamberlik as *Pollio*, and Lablache as *Oroveso*, sustained their parts in a manner in which the highest efforts of the lyric drama were exhibited. The reception of Madame Grisi was as enthusiastic as might have been anticipated, and great was the ovation at the close of the performance. In the first act there was apparent tameness, until in the scene with *Adalgisa* the old fire burst forth, and a splendid display, both of dramatic and vocal-art, was sustained to the close of the opera. The *Oroveso* of Lablache, and the *Adalgisa* of Mlle. Marai, were as perfect representations, in their style, as the *Norma* of the favourite of the night. While it was gratifying to witness so successful a performance, there were indications, here and there, of waning art, by which the public will be reconciled to the retirement which Madame Grisi is now prudently about to make.

The musical week at Paris has not been a very brilliant one. At the Théâtre Lyrique, a little opera, called *Maître Wolfgram*, the music by an unknown composer named Reyher, the libretto by Méry, has been brought out. The music is creditable, and gives promise of future excellence.

The French Government has ordered 'God save the Queen' and 'Rule Britannia' to be added to the *répertoires* of the regimental bands, though to be sure the fact is more political than artistic. The order is only a few days old, and yet we hear from Paris that our two glorious old national strains are being performed so frequently that they seem likely, before long, to become quite familiar to the Parisians. It is to be regretted that our regiments will not be able to return the delicate compliment of our French friends, as, unfortunately, the French have no national song. The 'Marseillaise' cannot be so considered, notwithstanding its majestic beauty, and the witching power it exercises over Frenchmen; for, in words, it is not only totally unadapted to the present situation, but in the eyes of the existing French Government is seditious, and is proscribed as such. Nor can the 'Chant du Départ' be taken as the national song, though both in words and music it is very fine, for it is enthusiastically Republican, and Republicanism is out of fashion now-a-days. 'Vive Henri IV.' was long the national song, but it would be an anachronism now that his descendants are in exile. Neither can the 'Parisienne' be admitted to the honour of being so considered, inasmuch as it is all about Louis Philippe and the Revolution of 1830, and they are dead and buried, and what is worse, out of favour. The famous 'Mourir pour la Patrie,' which bloused patriots roared in the streets in 1848, might, at first glance, seem suitable enough, but at best it was the song of a faction, and is treasonable now. There remains, to be sure, the piece entitled 'Portant pour la Syrie,' which was written and set to music by Queen Hortense, mother of the present Emperor; but the music, notwithstanding its prettiness, has not the vigour and energy of a national song, and the song itself is but a sentimental ditty, telling how the 'young and handsome Dunois,' a brave Crusader, loved and wedded the Lady Isabel—a theme which may charm young ladies at a boarding-school, but which is inappropriate as the expression of a nation's sentiments.

At Paris the principal theatrical event since our last has been the reappearance of Rachel at the Théâtre Français, she having retracted her resignation. She was heartily welcomed back again, notwithstanding her numerous caprices have greatly weakened her hold of popular favour.

At the Ambigu Theatre there is a fairy piece, in we know not how many tableaux, of extraordinary splendour. At one time the English were superior

to the Parisians in this class of spectacle, but they are so no longer. There is something almost wonderful in the ingenuity and gorgeous decorations of the French pieces, and the sums spent in producing them are enormous. Formerly it was only at rare intervals that things of the kind were brought out; but now-a-days there is constantly one in vogue at some Boulevard theatre or other. In this fact many persons see a proof of the decline of the French drama; and we are disposed to agree with them.

FOREIGN CORRESPONDENCE.

ASTRONOMICAL.—March 10th.—Arthur Kett Barclay, Esq., V.P., in the chair. J. S. Ancona and James Cockle, Esq., were elected Fellows of the Society. 'On some peculiar Features in the Structure of Lunar Volcanic Craters,' by James Nasmyth, Esq. In pursuing my investigations of the features of the lunar surface, aided by my very convenient 20-inch aperture reflecting telescope, I have been much interested in observing the details of what have hitherto been termed 'terraces,' namely, certain concentric ridges around the interior walls of the lunar volcanic craters; and as their peculiar features appear to me to throw some additional light on the nature of the action which has caused the formation of those remarkable 'ring mountains,' and which I take to be in reality the craters of extinct volcanoes, a few remarks on the subject may, perhaps, prove acceptable. On a careful scrutiny of these concentric ridges above alluded to, I find that they are by no means continuous or regular in respect to height or position, but, on the contrary, are indented and broken, and that in many cases they form but a small segment of the interior wall of the crater; while, in other cases, portions of these 'terraces' have slipped down, and that the flat bottom or plateau of the crater at the spot is covered with the *débris* of portions of the interior wall;—in short, that these features are the result of vast 'landslips,' which, when occurring to any great segment of the inner wall of the crater, yield the 'terrace-like' appearance, while in a more limited extent they leave a notch or recess in the bank or cliff, and the *débris* seen at the base are the fragments of the landslide, many portions of which may be traced scattered about and projected inwards towards the centre of the plateau. When these features are carefully examined with this 'landslip' idea present in the mind, the evidences of such being the true cause and nature of their appearance become irresistible; inasmuch as that any one who has seen 'landslips,' and the fallen-in interior walls of volcanic craters, will be struck with the similarity of the aspect of the features in question. With respect to the cause and the nature of the action which appears to me to have occasioned the features in question, I consider that the most probable explanation is, that during the most active state of those volcanic craters the matter ejected from the volcano accumulated, and was piled up to such a height on the summit of the great circular wall or crater, as by its crushing-down action, aided by the undermining and softening action of the intensely hot lake of molten lava (then occupying the bottom of the crater), the vast superincumbent mass forming the wall of the crater had, from time to time, and to a greater or less segmental extent, crushed and slid down, and so settled in a more permanent position: when occurring to a great segment, resulting in the 'terrace-like' appearance; and when in a more limited extent yielding all the well-known features of a 'landslip.' It occurs to me, that if any one (having suitable telescopic means) will carefully examine the details of these features, they will not fail to regard these remarks as worthy of consideration, as yielding what appears to me a rational explanation of their nature and origin. I may state that I consider the era of the active condition of the lunar volcanoes to have gone by ages ago.—'An Account of the Hartwell Rectory Observatory,' by the Rev. C. Lowndes. It might be thought that an observatory on the Rectory grounds at Hartwell would be quite unnecessary, as Dr. Lee

has such an excellent one so near, to which, out of pure love of and to advance the science, he has given me, and indeed all who take an interest in astronomy, free access. But, as in the spring of 1849 I had commenced taking meteorological observations for the British Meteorological Society, of which I have been a member from its formation, I was very anxious to have an observatory of my own, and decided upon building a very small one. My friend and neighbour, the Rev. J. B. Reade, mentioned my intention to Dr. Lee, when he very generously and kindly said, if I would build a larger one, he would give me all the materials. Such an offer I was only too glad to accept, and accordingly I set about the work of building a transit-room, intending, when circumstances would allow, to add an equatorial-room. A committee was formed at Dr. Lee's suggestion, consisting of himself, the Rev. J. B. Reade, and T. Dell, Esq., to fix upon a site, and to superintend the work. That site is the best, under the circumstances, which could be chosen, and commands the passage of Fomalhaut to the south. As no distant object can be seen, and there are no meridian marks, I am compelled to adjust the collimation by the passage of Polaris, and thus obtain the error. The transit-room is substantially built of brick, upon a solid bed of concrete, and is ten feet square in the clear, and eight feet nine inches high, the top being covered with lead and the two shutters with copper. The floor is supported by joists, forming square frames round the transit and clock-piers, so that no tremor can be communicated by the planks; and the clock and two transit-piers are also placed upon solid beds of concrete, independent of the walls of the building. The two piers supporting the transit instrument are of Caen stone, four feet eleven inches above the floor. The transit instrument was made by Mr. T. Slater, optician, No. 4, Somers-place West, New North Road, London, and is supported upon brass Y's by two cones, which form an axis of two feet five inches in length, the pivots which rest in the Y's being made of bell-metal one and three-quarter inches in diameter. Two adjustments are attached to the Y's, the one on the west pier for making the axis horizontal, the other on the east pier for adjusting the telescope in azimuth. The telescope is five feet seven inches in length, having an object glass, whose aperture is four and three-quarter inches in diameter. There are five fine verticle wires and six thicker ones, for taking faint objects, placed in the principal focus, the intervals by Polaris of the five fine wires being ten minutes forty-four seconds. The setting circles are fixed at the eye-end of the telescope; they are six inches in diameter, and are divided on silver. There is also a dew-cap fixed at the object-end, made of zinc, densely blackened within. The level used for adjusting the horizontal position of the axis of the transit instrument was also made by Mr. T. Slater; the value of each division is one second in space. The clock, which is placed in the south-west corner of the building, was made expressly for me by Mr. Dent; and a very excellent one it has proved. It has a compensating pendulum, and a particularly good beat, and keeps an equitable losing rate; the variation on its rate being (invariably) less than one-hundredth of a second. It has a tendency to gain this quantity in the cold weather, and to lose it in the warm weather. The foregoing description was accompanied by an account of the meteorological department of the Observatory, and a detailed statement of the expenses connected with the undertaking. The following is the recapitulation on the latter head:—

	£ s. d.
Cost of the building.....	55 0 9
Cost of astronomical instruments.....	138 10 0
Cost of meteorological instruments.....	17 2 0
Total.....	210 12 9

The paper also contained a few transits taken by Mr. Lowndes, at his Observatory; and a few similar observations made at the Observatory of Hartwell House by Dr. Lee's assistant. The results for the several wires are very accordant in both cases.—'Remarkable Appearance of the Sha-

dow of Saturn projected on the Ring,' by J. Hippley, Esq. I observed Saturn near, and on the meridian, with a Newtonian equatorial of nine and one-quarter inch aperture, powers 360 and 462. The atmosphere afforded conditions of very unusual definition. I perceived distinctly a faint line or belt on the outer ring, at about three-fifths of its breadth from the inner edge. This line did not at all give the impression of a division; but as compared with the tint of the main separation of the rings, was, though of sensible breadth, of a much paler and fainter shade. Having on a previous occasion of similar, but equally rare, atmospheric tranquillity, had the advantage of viewing Saturn with Mr. Lassell's twenty-foot telescope, and recalling some other circumstances of even superior definition with which the planet, as to its other features, was then seen, I feel assured that the outer ring was not at that time marked by any similar belt or line; and that those markings are therefore of a variable character. But the most remarkable feature was the shape and position of the shadow of the ball. This was conspicuously curvilinear, with the convexity towards the ball; and of such curvature that the curve produced ought to have passed over a considerable portion of the outer ring, if that ring had been in the same plane with the inner. It did not, however, visibly touch the outer ring at all; which retained its brightness unshaded up to the point at which it was occulted by the vertex of the ball; affording, it might seem, evidence that the plane of the outer ring was sensibly raised, at that side, above the edge of the inner: moreover, the impression derived from the shape of the shadow was that the surface of the inner ring was convex, and perceptibly thicker at the middle than at either of its edges. Perhaps it may be desirable to add, with reference to the value of the observation, as illustrative of the quality of the vision afforded by the condition of the atmosphere, and the excellence of a speculum lately refurnished for me by Mr. Lassell, that the small star of γ Andromede, also near the meridian, was readily divided with the power 462, the division being seen not by occasional and instantaneous glimpses, but steadily and repeatedly for three or four seconds at a time, with such distinctness that an eye used to such objects could scarcely have overlooked the duplicity. The transparency also of Saturn's faint ring was also satisfactorily visible, especially at the preceding limb of the ball, where it was more manifest than at the other side.

ASIATIC.—May 20th.—This Society held this day its thirty-first anniversary meeting, Sir Geo. T. Staunton, Bart., in the chair. The Report of the Council began with referring to the losses which the Society had sustained during the past year by the decease and resignation of members. Obituary notices of three eminent men, whose loss the Society had to lament, formed a part of the Report, from which we make a few extracts:—"The Rev. Dr. W. H. Mill was a graduate of Cambridge, where he took a wrangler's degree, contemporaneously with Sir J. Herschel. He soon became eminent for his knowledge of Oriental languages, and was appointed, in 1820, Principal of Bishop's College, Calcutta. While there he prepared several translations from English into Arabic and Sanscrit; but his chief work was the 'Christa Sangita, or, Life of Christ,' in elegant Sanscrit verse. The merits of this work were admitted by the learned scholars of India, who gave the author the title of the Modern Kalidasa." "Mr. Forbes Falconer, who studied under the tuition of Silvestre de Sacy, united an extensive and most accurate knowledge of the languages and literature of Arabia and Persia, with uncommon diffidence of his own powers. He was more especially attached to the poetic literature of the East; and his critical editions of several works of Sadi, Nizami, Jami, and others, with occasional translations, evince as well his accurate philological knowledge as his tasteful appreciation of poetic beauty." "Dr. Grotefend, of Hanover, furnished the first key to the Cuneiform alphabet, by means of which

the world is already in possession of much of the ancient history of man which was formerly but darkly handed down to us, and which is daily adding to our knowledge of the times contemporaneous with the earlier events recorded in our sacred history." The Report then proceeded to give some notice of the progress made in Assyrian discovery during the past year. One of the most recent results is the finding of a fourth obelisk at Nimrud, of very uncouth shape, but of fine material, and well wrought, covered with bas-reliefs and inscriptions. This obelisk, as we learn from Col. Rawlinson, was set up by Shamas-phul, the son of the monarch who erected the one now in the British Museum. The inscription begins by recording a domestic revolution, and goes on with a detail of the conquests of the king, and the enlargement of the power and dominion of Assyria. Col. Rawlinson has seen the Chaldean collection making in the south, by Mr. Taylor, British Consul at Bussorah, and, after a cursory examination, has drawn up a list of eighteen of the primitive kings of Babylonia. These Chaldean relics, it is hoped, will form the nucleus of a history of Western Asia, contemporaneous with, and even preceding, the establishment of the children of Israel in the Holy Land. The chronology of Assyria during the past year has received an important addition from an inscription of one of the early kings, which records the construction of a temple as far back as 1840 B.C. This discovery was first made by Dr. Hincks, and has since been fully confirmed by Col. Rawlinson, who has found a more perfect duplicate of the same document. Recent letters also state that Col. Rawlinson has read the name of Semiramis on a statue of one of the gods, and from this she would appear to have been the wife of Pul, King of Assyria, mentioned in the Book of Kings. Another curious and recent discovery is, that the Babylonian Cuneiform alphabet was employed as late as the commencement of the third century B.C. Some tablets discovered by Mr. Loftus at Warka contain names which are unmistakably those of Seleucus and Antiochus. The Report then adverted to a question sometimes asked as to what dependence could be placed on these readings; and observed, that those who have given attention to the subject, and have watched the progress of decipherment—those, in fact, who are the best able to form a judgment on the point, are satisfied. The general truth of these discoveries must, however, be admitted by all, when it is seen that men, working independently, and far removed from each other, come to the same conclusion. It is, in fact, impossible to imagine a system of interpretation which could always produce consistent results from any number of given documents unless that system were true. The establishment of the Assyrian Excavation Fund was next noticed, and its claims to the support of the members of the Society, and the public at large, advocated, the fruits already derived, as detailed in a recent Report, being very promising and important. There are many spots yet uninvestigated; and further researches and excavations are alone wanted to render complete the restoration of the history, arts, manners, and chronology of the Assyrian people. The Report next congratulated the members upon the completion of a very valuable descriptive catalogue of the Arabic and Persian Historical MSS. in the Society's library, and for which they were indebted to the labour and learning of W. H. Morley, Esq. Votes of thanks were passed to the Council and Officers of the Society, and much satisfaction was expressed at the position of the institution, and of its importance as a means of spreading a correct knowledge of Oriental learning, opinions, and customs. A ballot took place for the Director, Secretary, Treasurer, and Librarian, who were all re-elected. The following gentlemen were elected new members of the Council:—Dr. R. G. Latham; O. De B. Prieux, Esq.; T. C. Robertson, Esq.; Lieut.-Col. Sykes; and Sir Richd. R. Vyvyan, Bart., M.P.

SOCIETY OF ARTS.—May 17th.—The Very Reverend the Dean of Hereford in the chair. On

the walls were exhibited a collection of sixty photographic views, by Mr. P. H. De la Motte, of the Crystal Palace, showing the progress of the building itself, of the different Architectural Courts, of the Natural History Department, of the Ancient and Modern Sculpture, &c. These views had been most liberally presented to the Society by the Directors of the Company. Twenty-two photographic views in Gloucestershire, presented by Mr. Joseph Curdall, were also shown. The paper read was 'On Visual Education as applied to Geology, illustrated by diagrams and models of the Geological Restorations at the Crystal Palace,' by Mr. B. Waterhouse Hawkins, F.G.S., F.L.S. The Crystal Palace, it was considered, might be properly described as one vast and combined experiment of visual education. Direct teaching, through the eyes, had been recognised as a principle and facility of education for some years past, even in the limited sphere of schools, and the name of Pestalozzi deserved the most honourable mention in connexion with its first enunciation. His lessons on objects were urged upon the public attention some twenty years ago, and a writer quoted at the time in support of the principle, shrewdly observed that "we daily call a great many things by their names, without even inquiring into their nature and properties, so that in reality it is only their names and not the things themselves with which we are acquainted." If this remark was applicable to our superficial knowledge of everyday objects, how much more literal did it become when applied to that branch of science which treated of the history of fossils, of extinct animals that had peopled the world in ancient times. To the great majority of the public these restorations will present all the novelty of a first acquaintance, and even many students in geology have hitherto been unable to realize the true form and size of those extinct animals, with the names of which they might, however, be perfectly familiar. The science of palæontology has two principal applications—to zoology and to geology. By the first is made known those new, or rather unknown, forms and conditions of existence which were often wanting in living nature; and by the second, is furnished the only certain basis for the determination of the stratified earths. In late years fossils have revealed remarkable facts concerning the state of the globe at divers epochs; and an inspection of the various strata in which remains have been deposited served to show that, in general, a constant order had obtained in their formation. The author next went on to explain a diagram exhibiting a view of the succession of epochs, each epoch containing a succession of periods and formations, which though often found to have been disturbed by some vast convulsive force, could yet be retraced to its natural order of succession and super-position. The extraordinary inhabitants of the new red sandstone, of the lias, of the upper portion of the lias, sometimes known as the alum shale, so well developed at Whitby, and of the oolite, were then severally described; and it was shown how, by induction, Professor Owen, our British Cuvier, had been enabled to unite together detached fossils so as to form complete animals. In the Crystal Palace restorations, sketch models to scale, either a sixth or a twelfth of the natural size, were first made, and such attitudes were given to them as Mr. Waterhouse Hawkins's long acquaintance with the recent and living forms of the animal kingdom enabled him to adapt to the extinct species he was endeavouring to restore. Clay models, built of the natural size by measurement from the sketch models, were then made, and when they approximated to the true form, the author, in every instance, secured the anatomical details and the characteristic features of each specimen. Some of these models contained thirty tons of clay, which had to be supported on four legs, as their natural history characteristics would not allow of recourse being had to any of the expedients for support allowed to sculptors in ordinary cases. In the instance of the Iguanodon, this was no less than building a house upon four columns, as the quantities of material of which the standing Iguanodon is composed consist of four iron columns nine feet long

by seven inches diameter, 600 bricks, 650 five-inch half-round drain tiles, 900 plain tiles, thirty-eight casks of cement, and ninety casks of broken stone, making a total of 640 bushels of artificial stone. This, with 100 feet of iron hooping, and twenty feet of cube inch bar, constituted the bones, sinews, and muscles of this large model, the largest of which there was any record of a casting having been made.

May 24th.—Henry Chester, Esq., in the chair. The paper read was 'On the Microscope, as applied to Art, Science, Manufactures, and Commerce,' by Mr. S. W. Leonard. The author commenced by observing that the microscope had now attained a position but little inferior to the telescope; that it was no longer considered "a plaything," but was the necessary companion of some of the most learned and comprehensive minds of our day. In the healing art, an enumeration of its uses could only be done justice to by a medical professor. As an educational instrument, in the various departments of medical science, the microscope had become indispensable. To the physiologist it revealed the minute structure of animal and vegetable tissues, showing the remarkable similarity that existed between their forms in the early stages of cellular development. The comparative anatomist unerringly determined by its aid to what kind of animal a tooth, or fragment of bone, found in any strata belonged, whether bird, beast, reptile, or fish; and in many cases even what species it belonged to. To the geologist the microscope discovered the astounding fact, that in many parts of the world, miles of strata of great thickness were almost entirely composed of the skeletons and shells of minute animals, in the formation of which deposits, and in covering them up with overlying strata, countless ages must have been occupied. By the aid of the microscope the naturalist, as with the wand of a magician, called up multitudes of minute vegetable and animal races inhabiting the earth, the air, and the water, even to the depths of the ocean, from the snow-clad polar regions to the burning deserts of the torrid zone, and which had never yielded up to any other power that man was possessed of the long-preserved secret of their hidden existence. To the chemist it was becoming a valuable assistant, for it had already determined the existence of arsenic in a case of suspected poisoning. Recently it had been applied to the newly-discovered art of photography, though at present without much success. In commerce the microscope lent its powerful aid for the detection of fraud by the adulteration of numerous articles, both as imported from foreign countries for consumption here, and as adulterated by the dealers in them at home. The farmer by its aid might frequently discover the causes of failure in many of his crops, and in future try to provide remedies for some of the more destructive of them; and both he and the merchant might be guided in the purchase of guano by its use. The author then examined in detail the many substances used for food which were constantly liable to be adulterated by dishonest dealers, and which the microscope had done much to abate, or at least to expose. In regard to manufactures it had been successfully applied to the examination of various textile fabrics. The different fibres employed having each a distinctive character, it determined whether that which was purchased for linen-cloth, or for silk, was entirely composed of those fibres, or had any mixture of cotton or other material. One grand discovery effected by means of the microscope was that which was termed ciliary movement. This discovery was due to Leuwenhoek, who noticed it in the *volvox*. Baker, in 1744, described the cilia in the wheel animalcule, and made a distinction between their rotatory and vibratile motions. This minute but extraordinary animalcule had at the interior part of its body two small organs like wheels, and like them apparently moving on their axis. This motion was now well known to be an optical illusion. The apparent wheels of the animalcule were two circular rows of cilia, which had a waving motion given to them by means of the muscular apparatus

employed. They did not wave simultaneously, but successively round the whole circle, thus giving the appearance of a wheel in motion. In the *volvox globator* the cilia are distributed over the whole surface of the body—almost, it is believed, the only instance of the kind. This beautiful microscopic object had engaged the attention of eminent men, in the endeavour to determine whether it belonged to the vegetable or animal kingdom. Two papers, one by Mr. Bush, and the other by Professor Williamson, both of whom advocated the vegetable nature of the *volvox*, were referred to, and the views of Siebold and Ehrenberg, the latter of whom advocated the animal nature of the *volvox*, were likewise explained. In conclusion, the author observed that the wondrous structure of those splendid beings (the *volvoes*), with myriads of other minute and beautiful organisms which the microscope had made us acquainted with, might well overwhelm a contemplative mind with astonishment and fervent adoration of that Great Power whose infinite wisdom and goodness shine forth with equal lustre in these, as in the greatest and most glorious works of the boundless universe.

CIVIL ENGINEERS.—May 23rd.—James Simpson, Esq., President, in the chair. The paper, 'On the Casualties of Tunnelling, with examples,' by Mr. W. M. Peniston, M. Inst. C.E., was in reality a relation of the difficulties encountered in the formation of some tunnel headings through chalk and green sand, under a head of water, at Holywell, on the line of the Wilts and Somerset Railway. The materials had been collected from the author's diary of the proceedings, and it had been his intention to give many more details, as practical examples for the younger members of the profession, but with access to the excellent work on Tunnelling, by Mr. Simms, it was feared that the communication might be deemed too prolix. It was intended that No. 1 Tunnel should have been constructed in the usual manner, by sinking shafts, and connecting them by a bottom heading running through between open cuttings at the north and south ends; there were, however, indications, from the borings, of the ground being unfavourable, the body of the tunnel being in chalk full of faults, whilst the cuttings at both ends were in green sand, and copious springs showed themselves along the line of operations, which were conducted through strata generally dislocated, and not to be depended on. In sinking the shafts, the water brought away with it such quantities of sand as to create cavities around and produce serious failures in the timbering, which required to be renewed and replaced several times. Numerous contrivances were essayed for overcoming the difficulties,—gulleys were cut at lower levels, in hopes of their drawing off the water, but the tenacity of the soil and the numerous faults precluded any chance of their being useful; nothing but incessant pumping could therefore be relied upon; but the consequence of this was, that the framing of the shaft sunk bodily, until it was retained by a hanging kerb and rods from the surface; then, in spite of close sheathing planks, a lateral settlement occurred, and amidst a recurrence of these accidents the shaft was carried down until the sand and water rose so rapidly in the bottom, that it was necessary to close it by a timber platform, through which the water rose to a certain level, whence it was pumped. Similar difficulties were encountered in the other shafts, enhanced, in one case, by the frequent recurrence of boulders of sand-stone, which occasioned much loss of time and inconvenience in extracting them, and left large cavities behind the sheathing. The quantity of water also increased so much, that the briefest delay in pumping obliged the men to leave the headings. At length it being observed that the dip of the sand-rock, which was the water-bearing stratum, was in such a direction as to induce the inference that it might be used to convey the water away, by having it tapped at a lower level, the attempt was made, and was attended with success. In the subsequent extension of the open cut-

tings, the numerous vertical faults were shown to have been, in a great degree, the cause of the slips in the shafts. In consequence of observations on the saturated strata, it was determined to try the effect of a syphon, which was accordingly laid down; it was formed of cast-iron pipes, six inches diameter, the short leg dipping into a hole at the bottom of one of the shafts, whilst the long leg extended through the crown heading and terminated in a cistern in the north cutting. By means of a hand-pump, at the upper bend, the air was exhausted, and the action was so perfect as to drain the blocks of sand and enable the headings to be completed. Accounts were given of the numerous ingenious contrivances resorted to for overcoming difficulties, and also of the effects of the drainage upon the springs and wells in the neighbourhood. The various machines and devices employed were described, in connexion with all the tunnels; in fact the paper was, as it professed to be, a detail of the casualties of tunnelling, under circumstances of considerable difficulty, and it was well illustrated by a series of diagrams, showing the works in all stages of their progress.

STATISTICAL.—May 15th.—Sir John P. Boileau, Bart., V.P., in the chair. A paper was read, entitled 'A Statistical and Historical View of the Statute Law of the Realm, from the earliest recorded period to the present time,' by William Tayler, Esq. The author commenced by stating that the statutes were inscribed in Latin to the time of Edward I. (1272), in Norman French to about the time of Richard III. (1483), and subsequently in the English language. The earlier statutes were extremely defective, and courts of justice were not unfrequently overawed and influenced by the crown or corrupted by the nobles. He gave the number of statutes passed in each reign from Henry III. (1225), to the 16th and 17th of Victoria (1853), and passed in review the more interesting or special ones. The aggregate number of statutes of all kinds passed from the 12th of Henry III. to the end of the reign of Charles I., comprising a period of nearly four centuries, was 3316. The acts and ordinances of the Commonwealth and Protectorate (1649-60) were not recorded as statutes of the realm, every possible trace of the acts of the regicides and rebels being removed at the Restoration, but from a scarce work of the period it appeared that they consisted of some hundreds of rare and curious ordinances, many of them assuming the character of imperial edicts. From the time of Cromwell to the end of George II. (1660 to 1760), there were 5844 statutes of all kinds enacted. In the long reign of George III. (sixty years), the number of statutes passed was 14,800. In the reign of George IV., 3223; William IV., 1802; and in the sixteen years' reign of Victoria, 5334; in all, from Henry III. (1225) to the present time, 34,319 statutes of every description. A tabular statement gave a subdivision of the acts into public and private, and, in latter years, into local acts. The average number of statutes that were passed annually, in each reign, was also given, and they exhibited the great increase of legislation in recent years. In the reign of Henry III. (1225) the number of the statutes passed per annum was only 26 (one every four years). In the reign of Henry IV. (1399) they had increased to 10.9 per annum. In the reign of Edward IV. (1461) they had receded to 2.4. In the reign of Edward VI. (1547) they had increased to 27.8, and in the time of Charles I. (1625) had again receded to 3.5. In the time of William and Mary (1688) they had increased to 60.2; in the time of George II. to 34.6; in George III. to 246.7; in George IV. to 322.3; in William IV. they had receded to 257.4; and to the 16 and 17 Victoria they had increased to the large number of 533.4 per annum, the average of the reign being taken in each instance, thus showing the rapid increase of legislative enactments in times of peace and internal tranquillity. The author concluded by an appeal for a legislative consolidation of the statutes into a code or system under distinct heads, and for the abso-

lute expulsion of all expired, obsolete, or repealed statutes: the number of the last he could not arrive at from the chaos that prevailed. He expressed his full conviction that it was competent for an effective commission appointed for such purpose to effect a consolidation of the statutes, and to free them from those not in force, and the measure would be only in accordance with the recommendations of many learned authorities and jurists from Lord Chancellor Bacon downwards, and would not fail to confer on the statesman who should devote himself to the task the gratitude of his country.

GEOLOGICAL.—May 10th.—Prof. E. Forbes, President, in the chair. The following communications were read:—1. 'Notes on some Fossil Fishes.' By Sir P. Egerton, Bart., F.G.S. Several of the fossil fishes, hitherto referred to Tetragonepis, which genus was established by Brown for certain Pycnodont forms, having been found by the author to belong to the Lepidoid family, and to be characteristically different from Dapedius in the structure of the teeth, Sir P. Egerton proposed to assign them the new generic appellation *Echmodus* (cusp-tooth). Sir Philip then described two new species of Lepidotus, (*L. longiceps* and *L. breviceps*), lately sent to England by Dr. T. Bell, from Kotah, in the Deccan, from whence a *Lepidotus* and an *Echmodus* (both of hassic type and previously unknown) have been received within the last two years. A description followed of a new fossil fish, from the upper beds of the New Red Sandstone at Bromsgrove. It is characterized as having its head diminutive; body short and deep (three inches in length, by nearly two in depth); back steeply vaulted, with two dorsal fins; scales ganoid; tail homocerocal. Sir Philip names this peculiar little fish *Dipteronotus cyphus*, and observes that it is very distinct from any known fossil or recent fish; that it is a member of the Lepidoid family of the Ganoids, and that it may provisionally be arranged near the genus *Euryotus*. Lastly, the author described in detail the osseous structure of some remains of fish in the Nummulitic limestone of Mokattam, near Cairo, Egypt. The specimens are fragmentary, but indicate a large number of individuals of one species. This Mokattam fish had a close resemblance to the Scienoids and particularly to the genus *Pristopoma*, in the characters of the organs of locomotion and the general form of the trunk, but in the opercular apparatus and the osteology of the cranium, it more nearly approaches the Percoids. The dentition differs from both, and somewhat resembles that of some of the Sparoids. Prof. Hermann von Meyer appears to have figured and described this fish under the name of *Perca Lorenti*. 2. 'On some fossil Insects from the Purbeck and the Oolites.' By J. O. Westwood, Esq., (the reading of this paper was not completed at this meeting.) 3. 'On the Pegmatite of Ireland.' By M. Delesse. The Pegmatite, or Graphical Granite of the Morne Mountain, Ireland, is remarkable for its cavernous structure, which is the more observable in the pegmatite with topaz. It is probable that the cavities of the pegmatite are due to the separation of the fluorine gas, the fluor being afterwards fixed in the topaz and the mica. This pegmatite is also remarkable for the presence of fayalite and of ferruginous peridotite; the latter being characteristic of rocks of igneous origin which have not an excess of quartz. The cavernous pegmatite appears to have been formed under very different conditions from those of granite prone.

ARCHAEOLOGICAL ASSOCIATION.—May 24th.—T. J. Pettigrew, Esq., Vice-President, in the chair. Three Associates were elected. Mr. J. Clarke, of Easton, exhibited a small brass coin of Constantine Tiberius, found in Suffolk. (It is noticed in 'Akerman's Catalogue,' vol. ii. p. 407.) He also communicated the particulars of the discovery of mural paintings in Easton Church, which are now destroyed. One of the figures, of which a tracing

was sent, represented an old man, apparently a captive, with his hands fastened behind him, about to be shot by an archer in a close cap and having a long beard. The other figures were—of a bishop, a king, a charlatan on horseback, with a deep conical cap, and a knot of ribbons flying from the top of it. The Nativity was also represented. Mr. Thompson exhibited a much corroded bronze, which had been enamelled, and represented a bird; the head and one of the legs were wanting. Mr. Pettigrew pronounced it to be Egyptian, and it most probably had belonged to a standard; the bird appeared to be the Ibis. It had been discovered among some old brass, and its history therefore unknown. The Rev. Mr. Hugo exhibited a small bronze Hercules found in New Cannon-street, and another from York was also exhibited, the latter of a more ancient character. Mr. Bennett sent a drawing of the porch of Chalk Church, Kent, representing in its sculpture the Whitsun-ale. This subject has been copiously treated by Mr. Douce in Carter's 'Specimens of Ancient Sculpture,' in reference to St. John's Church, Cirencester. Mr. Hay exhibited twenty-five charters relating to the Moreton (Earl Ducie) family; they were referred for particular examination. Several had their seals, and were very perfect. They belonged to the fourteenth and fifteenth centuries. Mr. W. W. King exhibited several rubbings from interesting brasses of the fifteenth century, chiefly from St. Albans. The remainder of the evening was occupied in the reading of a long paper by Captain Shortt, of Heavitree, entitled 'Notes of a Visit to Berry Castle and Sidbury Castle, the latter supposed to be the Tidortis or Tidentis of the anonymous Ravens, in the County of Devon.' The chairman announced that the Eleventh Annual Congress would be held in the month of August next, at Chepstow, and that Raglan, Tintern, Caerleon, &c., would form objects for the excursions, and that a visit would also be paid to Bristol.

SURREY ARCHEOLOGICAL.—*May 10th.*—This newly organised Society held their first meeting on the 10th instant, at the Bridge House Hotel, Southwark, Henry Drummond, Esq., M.P., F.R.S., in the chair. A large collection of rubbings of brasses, in which the county of Surrey is especially rich, was exhibited, and numerous objects of antiquarian interest, comprising specimens of pottery, coins, gems, arms, sculpture, deeds, charters, autographs, seals, &c. After an inaugural address from the chairman, an essay was delivered by the Rev. John Jessopp, 'On the Religious and Moral Bearings of Archaeology.' Attention was called by the Chairman to an elaborately executed map of the Roman road from Silchester to Staines, which passes through Surrey, the survey for which was executed by the gentlemen cadets at the Royal Military College at Sandhurst. On this map, lent by the kind permission of Colonel Prosser, Lieutenant-Governor, were various descriptive notes, which were collected into the more convenient form of a separate paper, and some memoranda by Mr. Lance, of Frimley, were read to the meeting by Mr. G. B. Webb, Honorary Secretary. A paper was also read by W. Tayler, Esq., 'Upon a beautiful and curiously carved Crossbow of yew, discovered on Bosworth-field, and exhibited by him. Mr. Hart of Reigate offered a few observations descriptive of some interesting relics found in that neighbourhood, some charters, deeds, and historical documents, forming part of the collection upon the tables; and the Rev. F. Phillips exhibited an exquisitely carved Spanish rosary.

R. S. OF LITERATURE.—*May 24th.*—Sir John Donatt, V.P., in the chair. Mr. Vaux read extracts from a letter just received from Colonel Rawlinson, C.B., dated Baghdad, April 6th, announcing his discovery of the names of Seleucus and Antiochus the Great, upon some cuneiform tablets lately procured by Mr. Loftus at Warka, in Southern Babylonia, where he has been employed by the Assyrian Excavation Society in making further researches. Colonel Rawlinson expresses

his hope and his belief that this is only the commencement of yet greater discoveries, and that he will, in all probability, find ere very long considerable remains of Greek Asiatic history which have been hitherto either wholly lost, or have come down to us in a very fragmentary state. Mr. Davies read an elaborate paper 'On the Evil Eye,' in which he traced with great care and erudition the various customs connected with this superstition through Jewish, Greek, and Roman history, down to the existing practices in modern Italy.

NUMISMATIC.—*May 25th.*—J. B. Bergne, Esq., in the chair. Mr. Bergne read a paper communicated by Mr. Shaw, of Andover, 'On a very Rare Coin of Beorhtric, who has been considered by Mr. Hawkins and Mr. Lindsay, in their respective works, to have been one of the kings of East Anglia. Mr. Shaw is of opinion that, during the lifetime of his father Athelstan, Beorhtric governed East Anglia, with the rank of Deputy. The coin itself would appear to have been struck at a later period, as the monogram on it, in all probability, expresses the initial letters of Mercia and East Anglia. Mr. Vaux read a letter from Professor Holmboe, of Christiania, 'On Coins of Ethelred II., with the CRVX type on the reverse.'

MEETINGS FOR THE ENSUING WEEK.

- Monday.**—Entomological, 8 p.m.
Chemical, 8 p.m.
— Royal Institution, 2 p.m.—(General Monthly Meeting.)
Tuesday.—Limeane, 8 p.m.
— Royal Institution, 3 p.m.—(Prof. Tyndall, Ph.D., Vibrations of Heated Bodies.)
Wednesday.—Society of Arts, 8 p.m.—(Dr. T. King Chambers on Industrial Pathology, or the Injuries and Diseases Incident to Industrial Occupations.)
— Geological, 8 p.m.—(1. On some new Fossil Mammalia and Reptilia from the Purbeck beds of Dorsetshire, by Professor Owen, F.R.S.; 2. On a section exposed in excavations at the West India Docks, by William Blanford, Esq.; 3. On the Physical and Paleontological Distinctions of the London Clay and the Bracklesham Beds, by Joseph Prestwich, Esq., F.R.S.; 4. On the Relation of the London Tertiaries to the Lower Tertiaries of France and Belgium, by Joseph Prestwich, Esq., F.R.S.)
Thursday.—Royal Institution, 3 p.m.—(M. T. Masters, Esq. on Botany.)
Friday.—Astronomical, 9 p.m.
— Philological, 8 p.m.
— Royal Institution, 8½ p.m.—(Professor Faraday, D.C.L., on Magnetic Hypotheses.)
Saturday.—Asiatic, 2 p.m.
— Botanic, 4 p.m.
— Royal Institution, 3 p.m.—(W. B. Hodgson, LL.D., on the Importance of the Study of Economic Science as a Branch of Education for all Classes.)

VARIETIES.

Dr. Leichardt's Exploring Party.—A Melbourne correspondent writing to 'The Times,' says:—"A concert has been given at the theatre for the benefit of the mother of Dr. Leichardt, who led the last exploring party into the interior of Australia. Though the general belief that they have all perished is probably too well founded, yet some faint hope is entertained that they may be still living in captivity among some of the unknown tribes of aborigines. One attempt was made by the Colonial Government to trace them, but it was not prosecuted with much energy. In this state of doubt the following letter, published in the 'Sydney Herald,' is interesting; it is from Mr. G. W. Earl, a gentleman well known in the colony, who recently arrived in the Golden Age. He states that—"About an hour and a-half before the Golden Age left King George's Sound, Mr. Hester, the Superintendent of Police, came on board in search of some ticket-of-leave men who had escaped, and informed me that a messenger had just arrived from Swan River, with information that traces of Dr. Leichardt's party had been found about 200 miles to the eastward of the most remote inland station of the Swan River district, the remains consisting of broken watches, utensils, &c. Mr. Hester was so busy, while on board, hunting up one of the runaways, who gave a great deal of trouble, that he was

unable to furnish me with minute particulars, but he informed me that the colonists were perfectly satisfied that the remains must be those of Leichardt's party. Full particulars will, of course, be brought by the first vessel for this port that leaves Swan River. Mr. Hester is one of the most experienced bushmen in Western Australia, and as he was evidently convinced that the remains were those of Leichardt's party, I have a strong impression that the report will prove well founded."

SONGS OF THE WAR.

By Robert Story. Author of 'Guthrum the Dane.'

Bring out the Old War-flag!

BRING out the old War-flag! Long, now, it has lain,
Its folds, rich with glory, all piously furled;
And the hope of our heart was that never again
We should see it float forth in the wars of the world.
For still we remembered the blood and the tears,
Both real, for sight—not imagined, for song,
That dimmed e'en its triumphs through many dark years,
When it waved in the battles of Right against Wrong!

But down with regrets! or leave them to our foes,
Whose outrage forbids us at peace to remain;
And up with it now from its honoured repose,
'Mid the cheers of a people that cheer not in vain!
They cheer to behold it once more coming forth,
The weak to defend from the sword of the strong:
For, true to its fame, the old flag of the north
Will but wave in the battles of Right against Wrong!

Take, warriors of Freedom! the flag we bestow,
To be shortly unfurled at the trumpet's wild breath!

We give it you stainless; and Britons, we know,
Will bring it back stainless, or clasp it in death!
But why talk of death, save of death to our foes,
When ye meet them in conflict—too fierce to be long!

O! safe is the War-flag confided to those
Who fight in the battles of Right against Wrong!

II.

The Departure of the Troops.

Strong of hand, and brave of heart,
Say ye not our troops depart?
Might I live for ages yet,
Ne'er should I the scene forget!
There they stood, as leave they took,
English men in heart and look;
Feeling—loath to show they felt;
Melting—yet asbamed to melt!

Hands were stretched loved hands to clasp—
They shall soon give different grasp!
In their hearts regret was strong—
Others shall regret ere long!
Gloom bedimmed each visage proud—
Deeper gloom the foe shall shroud!
Tears—a few—they failed to stem—
Tears of blood shall pay for them!
Proudly wept the high-souled wife,
Sending forth her lord to strife;
Softer fell the sister's tear,
Bringing out her brother's spear;
Nobler grew the maiden's manner,
As she spread her lover's banner,
Bidding him, as that was borne,
Win her love, or fear her scorn!
Rudely wrenched from ties like these,
What to them are winds and seas?
Doomed such inward pangs to feel,
What to them are lead and steel?
Marched to battle, men like these,
Fate will brave, and victory seize,
Bearing high, through flood and flame,
Britain's flag and Britain's name!

ERRATUM.

In our remarks, in last number, on the Travelling Students of the Royal Academy, p. 494, Sir Hans Slouane was inadvertently written for Sir John Slouane.

THE ROYAL GALLERY OF ART,

ANCIENT AND MODERN:

Engravings from the Private Collections of Pictures

OF

HER MOST GRACIOUS MAJESTY THE QUEEN & HIS ROYAL HIGHNESS PRINCE ALBERT,

AND THE ART HEIRLOOMS OF THE CROWN,

AT WINDSOR CASTLE, BUCKINGHAM PALACE, AND OSBORNE.

EDITED BY S. C. HALL, F.S.A., &c.

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PUBLISHERS:—MESSRS. PAUL AND DOMINIC COLNAGHI & CO., PAUL MALL EAST; AND THOMAS AGNEW & SONS, MANCHESTER.

The Work may be ordered of any Print, or Book, Seller in Great Britain.

London: Printed for Lovell Reeve, of 5, Henrietta Street, Covent Garden, in the County of Middlesex (at the Office of Messrs. Savill and Edwards, No. 4, Chandos Street, Covent Garden, aforesaid), and published by him at his Office, 5, Henrietta Street, Covent Garden.—Saturday, June 3, 1854.